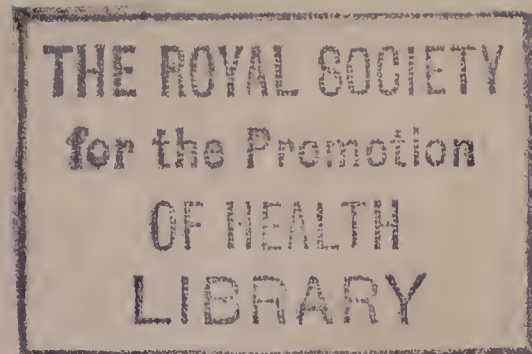


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# ANNUAL REPORT

DEPARTMENT  
OF NATIONAL HEALTH  
AND WELFARE

FOR THE FISCAL YEAR  
ENDED MARCH 31, 1967

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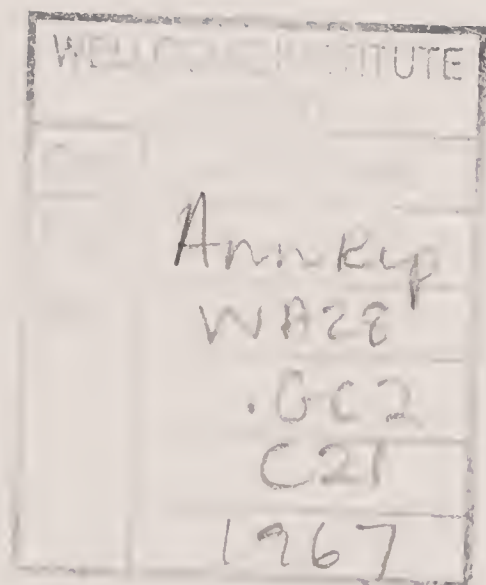


THE DEPARTMENT OF NATIONAL HEALTH AND WELFARE

# ANNUAL REPORT

for the fiscal year ended March 31, 1967

OTTAWA



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1968



His Excellency the Right Honourable Roland Michener, Governor General  
and Commander-in-Chief of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the  
Annual Report of the Department of National Health and Welfare for the  
fiscal year ended March 31, 1967.

Respectfully submitted,

JOHN MUNRO

Minister of National Health and Welfare



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To The Honourable John Munro

Minister of National Health and Welfare, Ottawa.

SIR:

The fiscal year 1966-67 featured a number of significant advances in health and welfare programs for the benefit of Canadians.

In the health field, two important pieces of legislation were passed by Parliament: the Health Resources Fund Act and the Medical Care Act. The first sets aside a total of \$500 million to go to the provinces for assistance in meeting capital costs of establishing health training and research facilities. The Medical Care Act, passed in December 1966 and scheduled to go into effect on July 1, 1968, permits the federal government to make payments to any province which implements a medical care plan that is comprehensive, universal, publicly administered and portable between participating provinces.

The fiscal year was an important one in the welfare field. Of considerable significance was the Canada Assistance Plan, which received Royal Assent on July 15, 1966, with effect retroactively from April 1, 1966. Its adoption represented the abandonment of the traditional "bits and pieces" approach to welfare assistance and provided for a modern, co-ordinated and all-inclusive public assistance program embodying for the first time federal cost-sharing of welfare services, public welfare administration and health services provided by provincial assistance programs.

The Guaranteed Income Supplement, an amendment to the Old Age Security Act, represented a significant reassessment and change of course in the Canadian approach to social security as a new concept embodying income support based on a guaranteed minimum income. This program is novel in that Canada is one of the few countries in the world which provides a selective type of payment geared to income. Royal Assent was given on December 21, 1966, and supplementary payments dated from January 1, 1967. By March, 1967, Old Age Security pension cheques including the supplement were mailed to 505,240 pensioners, of which 328,927 received the maximum amount payable. It is estimated that approximately 800,000 pensioners will receive full or partial benefits by March 31, 1968.

The Canada Pension Plan began payment of retirement pensions in January, 1967, and by March 31 these benefits were being received by 3,475 persons. A network of offices to serve the public, based on 37 district offices in major population centres, was developed and brought into operation during 1966-67.

The Food and Drug Directorate continued its careful control of the quality and safety of foods and drugs on the Canadian market. The establishment of the directorate was increased slightly in keeping with its important task, but is still below that considered desirable and recommended by the several parliamentary committees and others who have studied this question.



A reorganization of the Medical Services Branch established a Northern Region to provide better coordination in control of health services for the Yukon and the Northwest Territories.

An important event was the first National Conference on Child and Maternal Health which was held in Ottawa in March, 1967. Delegates from the provinces and visiting experts explored the total needs of mothers and young children and examined services now available, how they are used and what changes may be needed for increased effectiveness.

At the end of the fiscal year 1966-67 the Department's Smoking and Health program could claim wide interest and coverage by various means, with the result of awareness by nearly all the population of the hazards of cigarette smoking.

Under the national Fitness and Amateur Sport Programme, the principal objective has continued to be to assist the development of services at all levels of activity from the community to international games. Grants totalling close to \$3.5 million were made to assist national and international sports governing bodies and recreation programs during the year.

In closing, we wish to express our appreciation of the continued loyal and conscientious service and coöperation of all members of the staff of this department in 1966-67.

Respectfully submitted,

JOHN N. CRAWFORD  
Deputy Minister of National  
Health and Welfare (Health)

JOSEPH W. WILLARD  
Deputy Minister of National  
Health and Welfare (Welfare)

## INTERNATIONAL HEALTH

International Health has followed the pattern which has progressively evolved over previous years of continuing expansion in the two major areas of concern to the Department, involving Canada's membership and thereby its obligations to the World Health Organization as well as the health segments of other United Nation specialized agencies, and as the Federal Government Agency acting in an advisory and operational capacity for Canada's External Aid Program of bilateral assistance in the health field.

In the former, as the major activity, a substantially enlarged Canadian delegation attended and participated in the Annual Assembly of the World Health Organization held in Geneva during May 1966. The delegation was led by the Deputy Minister of National Health.

This Assembly was marked by the formal initiation of the W.H.O. smallpox eradication program aimed at eliminating this disease throughout the world within a period of ten years. Among other activities action was also taken in the extension of research in epidemiology and communication science as well as the international monitoring of adverse reactions to drugs. The W.H.O. budget for 1967 in the amount of U.S. \$51,515,000, representing one of the largest percentage increases in the history of the Organization, some 17% over the previous year, was approved, although firmly opposed by all of the major contributors.

Attendance of the P.M.O., International Health, at the Regional Committee Meeting for W.H.O. in the Americas this year held in Washington, D.C. together with the Directing Council of PAHO, as heretofore, continued in the capacity of observer. It is worthy of note in this context that as other commonwealth caribbean territories attain independence they promptly apply for and receive full membership in PAHO as well as W.H.O.

Other important liaison activities included participation at the First Latin American Conference on Medical Education held in Bogota, Colombia during August, as well as the Third Conference of the American Medical Association on International Health in Chicago during January 1967.

Regular and continuous exchanges are maintained with the W.H.O. Secretariat at Headquarters in Geneva and in the Region with increasing activity in connection with the fellowship, research and technical information programs of W.H.O. In the latter field a considerable amount of time is devoted to the completion of questionnaires dealing with general health as well as specific disease topics.

In the other major area of international health interest relates to Canada's External Aid Program, a sharp increase was noted in the numbers of health trainees coming to Canadian universities and other teaching institutions during 1966 totalling 133 - the highest ever. There was a slight fall-off in the numbers of scholars leaving for their home countries on conclusion of their training. This may reflect, in part at least, the



increasing number engaged in long-term studies such as undergraduate medicine and dentistry. A five year tabulation of the training picture including a summation of those who were in Canada at some time during the year is as follows:

|                            | <u>1962</u> | <u>1963</u> | <u>1964</u> | <u>1965</u> | <u>1966</u> |
|----------------------------|-------------|-------------|-------------|-------------|-------------|
| Arriving in Canada         | 67          | 89          | 85          | 113         | 133         |
| In Canada during year      | 186         | 206         | 229         | 282         | 326         |
| Departing for home country | 69          | 57          | 63          | 79          | 54          |

A review of individual programs for 1966 shows the largest group to be involved in undergraduate medical studies - 26 in all, with 22 in dentistry, 20 in various public health disciplines, 12 in the field of isotopes and radiation and, somewhat disappointingly, only 6 in nursing. While it would be premature to ascribe this last rather minimal figure to a developing trend it may, in fact reflect as in the previous year a sharp fall-off in the acceptance of trainees due to the progressive revision in training policies in the university schools of nursing. Only the future will determine this point.

Probably the most constructive step forward in the international health field was in connection with the formal establishment of a National Advisory Committee on International Health and the convening of its first meeting during October 1966. With a "permanent" membership of such major professional agencies as the Canadian Medical Association, l'Association des Médecins de Langue Française du Canada, the Royal College of Physicians and Surgeons, the Association of Canadian Medical Colleges and the Canadian Dental and Nurses Associations, this body with the addition of up to six representatives of other health-oriented organizations from time to time constitutes a most effective and valuable nucleus for future planning and progress in the field of international health.

## SPECIAL PROJECTS

During the year 1966-67, this office continued to be responsible for the administration of special health programs and projects which do not come within the specific terms of reference of other units of the Department. The Principal Medical Officer is also adviser to the Deputy Minister of Health on program planning and operations of the Department involving more than one operating branch and necessitating coordinated action at the Deputy Minister's level.

### Special Programs and Projects

#### Advisory Consultant Services to Expo 67

Since 1965, the office of Special Projects has served as a clearing-house for professional and technical health services provided by the Department to Expo 67. As a member of the Executive Committee of the Medical Advisory Board to the Corporation, he attended regular bi-monthly meetings largely concerned with planning activities. These sessions included the planning of a medical and hospital care program for Expo visitors including an emergency health care programs, the planning of a comprehensive control programs of environmental health and the establishment of an Industrial Health Clinic for the care of Expo and foreign pavilion employees.

#### Centennial Projects

This office also acted as a clearinghouse for centennial projects initiated by the Department and maintained close liaison with the Centennial Commission.

Under this particular program, plans have been made to publish during Centennial year, in the Medical Services Journal, Canada, a series of short histories dealing with the development and operation of health programs administered by the Department of National Defence, National Health and Welfare and Veterans Affairs.

#### Health Communications

The Principal Medical Officer, Special Projects continued to serve as Chairman of the departmental Health Communications Committee.

For the development of an outline for a national health sciences information program adapted to Canadian characteristics, members of the Health Communications Committee engaged in study and evaluation of reports on various aspects of information theory, operational research in libraries, comprehensive surveys of health sciences library and information systems on networks - such as the preliminary reports from the National Book League of Great Britain and the report by Herner and Co. commissioned for the U.S. President's Office of Science and Technology. The development and evaluation of various systems for the bibliographic use of Electronic Data Processing for health sciences literature has been followed with great interest - notably reports on MEDLARS (Medical



Literature Analysis and Retrieval System) developed by the U. S. National Library of Medicine. In connection with the use of EDP for bibliographic and other library purposes, close liaison is maintained with the Canadian Government's Central Data Processing Bureau. Two members of the Committee visited Washington to confer with Medical and Scientific Officers directing assistance programs in health sciences information in the U. S. A.

#### Federal Anti-Poverty and Opportunity Programs

This office was used as a clearinghouse for the planning and coordination of departmental efforts to combat poverty and to increase opportunity in Canada in the health field.

It maintained a close liaison with the Special Planning Secretariat, Privy Council Office and from time to time, the Principal Medical Officer, Special Projects, attended inter-departmental meetings arranged by the Secretariat to discuss individual departmental programs in this area and in a general way to promote coordination of action on the part of all agencies concerned with anti-poverty programs.

Articles dealing with health programs designed to alleviate poverty were also prepared in collaboration with the Special Planning Secretariat and were published in departmental publications.

#### Educational and Technical Information Services

##### Medical Services Journal, Canada

As of January 1967, the Principal Medical Officer, Special Projects was appointed Chairman of the Editorial Board of the Medical Services Journal, Canada, a professional and scientific health periodical published monthly under the joint authority of the Ministers of National Defence, National Health and Welfare and Veterans Affairs.

He also continued to serve as professional editor of various departmental publications including Canada's Health and Welfare and the annual report of the Department.

The Principal Medical Officer was also appointed formal liaison officer between the Department and French-Speaking universities.

## FOOD AND DRUG DIRECTORATE

The Food and Drug Directorate continued to carry out its responsibilities in relation to the Food and Drugs Act, Proprietary or Patent Medicine Act, and the Narcotic Control Act.

### Legislation

The Regulations under the Food and Drugs Act and the Narcotic Control Act required manufacturers, wholesalers and pharmacists to maintain records of the distribution of amphetamines, barbiturates and narcotics. Information became available that relatively large quantities of these drugs were also being dispensed by some medical practitioners and records were not available as to where and how these supplies were distributed as is the case when these products are dispensed by pharmacists. Since no authority was provided in the respective regulations to require medical practitioners to maintain records of their distribution of these drugs, new regulations were enacted to provide for such authority. The new regulations require physicians, dentists or veterinarians who dispense or distribute narcotics, amphetamines and barbiturates to patients for self-medication in amounts exceeding a three-day supply, to maintain distribution records in a form for audit.

Following the recommendation of the Fifth Report of the House of Commons Special Committee on Foods and Drugs, action was taken to enact regulations requiring every drug manufacturer to notify the Food and Drug Directorate on a prescribed form, of a complete list of the drugs in dosage form available for distribution in Canada. Manufacturers were required to file the necessary information prior to October 1, 1966, and annually thereafter.

In the administration of the regulations governing the distribution of new drugs, requests have been received by the Directorate from members of the medical profession to obtain a supply of a drug for use in the emergency treatment of a patient. Often the drug had been in use in foreign countries - for example for the treatment of a tropical disease - but had not been sold or distributed in Canada. Under the circumstances it was necessary to classify the drug as a new drug for which a notice of compliance had not been issued. To require the manufacturer to file the necessary data and information to comply with the new drug regulations prior to importation would result in a delay in obtaining the medication for the emergency situation. To overcome these difficulties regulations were enacted whereby the Director General may issue a letter of authorization for the sale of a quantity of a new drug to a medical practitioner for use in the emergency treatment of a patient under his care. Prior to issuing the letter of authorization, the medical practitioner must supply the Directorate with information about the medical emergency and indicate that he has information on the use, safety and efficacy of the drug.

It has been recognized for many years that there is considerable difference in the quality of the protein in various foodstuffs and rating values have been determined for a number of food items. To ensure that the public





The Food and Drug Building.



is not being misled by the claims made for the quality of the proteins in foods, regulations were enacted establishing the minimum protein ratings for foods which may be labelled or advertised as an excellent dietary source of protein and as a good dietary source of protein. Foods which do not meet the minimum rating for a good dietary source of protein are not permitted to make any claim for the protein quality of the food, other than to indicate the amount of protein in the food.

The regulations pertaining to smallpox vaccine were amended to comply with the requirements of the New Vaccination Certificate introduced by the World Health Organization, effective January, 1967. In these new requirements smallpox vaccinations are to be carried out only with vaccines meeting the minimum requirements for the product established by an Expert Group convened under the auspices of the World Health Organization.

In addition, regulations were enacted providing for the use of a number of food additives and the establishment of safe tolerances for residues of pesticides in foods.

#### Administrative Services

Several studies relating to administrative operations such as finance, accommodations and stores were carried out and results were implemented. A study of Regional Administrative Services was also initiated.

Accommodation planning and design occupied a major portion of attention. The expansion of the Directorate, especially at Ottawa, resulted in severe space shortages in the Headquarters establishment and it was necessary to relocate the bulk of the Bureau of Scientific Advisory Services in rented accommodations. Approval in principle was obtained for the construction of a major addition to the Food and Drug Building and for the conversion of an existing building to a laboratory for the Pharmaceutical Chemistry Division. Also, new laboratory and office accommodations were completed for the Vancouver regional establishment in March, 1967.

The Information Retrieval Centre was greatly expanded to handle the workload imposed by the Drug Notification Project and the greatly increased demands of other parts of the Directorate. A Miracode microfilm information retrieval system was installed and the necessary indepth studies carried out for the programming of drug data. By the end of the year, 20,000 drug data documents had been microfilmed and information can now be obtained by accession number, trade name and manufacturer. The coding necessary for retrieving information by formula, active ingredients, pharmacological form and a number of other properties was developed and large scale input is now underway. Progress was also made on the abstracting and microfilming of the data contained in new drug submissions, both human and veterinary. The indexing system used for the storage and retrieval of Rulings and Decisions was reviewed in depth. Work was continued on the indexing of scientific literature and the development of a suitable system for indexing reference material held in various Divisions of the Directorate.

In the Stores and Procurement area, purchasing under the centralized services of the Department of Defence Production was totally implemented and necessary alterations to procedures and forms were made. These procedural revisions, i.e., purchase by Standing Offer Agreements, were tested in preparation for widespread applications throughout the Directorate in 1967-68. The conversion to DDP purchasing was carried out with a minimum of disruption to continuing activities.

#### Consumer Division

The activities and responsibilities of the Consumer Division have continued to expand. Due to the increased interest in consumer affairs, a large number of enquiries have been received by the Division. Numerous articles have been written for publication, and demands on our staff have been heavy.

In addition to an extensive program of speaking engagements and attendance at consumer gatherings, particular emphasis has been placed upon the organization and direction of a drug educational program for consumers. This program has been extended to all parts of Canada and will continue to be expanded by means of additional educational material, use of mass media, and personal contacts.

The Advisory Council of Consumers held two meetings within the year at which they discharged effectively their advisory role in matters of consumer interest relating to the administration of the Food and Drugs Act and the Proprietary or Patent Medicine Act.

#### Bureau of Operations

Considerable progress was made in developing and modifying programs for the Field Inspection Service. A revised system of reporting food plant inspections was developed and this has enabled the Regional Offices to participate more effectively in program planning. New programs were developed for the inspection of drug manufacturers producing proprietary or patent medicines, for those receiving a notice of compliance for a new drug, and for the contamination of drugs during production, with penicillin. In addition a program was initiated to check the control of Schedule F drugs in nursing homes as well as maintaining a continuing surveillance of pharmacies regarding the sale of Schedule F drugs. During the year 628 drug plant inspections were completed.

With respect to foods, a new program was developed in the inspection of dairies processing milk for the production of cheese, powdered milk, etc. A total of 1670 food manufacturing plants were inspected. It was necessary to institute recall actions on some 26 different occasions involving food and drug products to prevent injury to the health of consumers.

In the Advertising, Labelling and Registration Division of the Bureau, 9,494 labels were reviewed and 26,642 radio and television continuities appraised for compliance with requirements. Some 221 new applications were received for proprietary or patent medicines and a total of 776 licences



covering the registration of 2,710 preparations was issued. In the case of the biologics, licences were issued to 81 drug manufacturers covering some 3,000 products in dosage form.

A new Drug Notification Section was established to administer the regulations enacted in October, 1966, requiring each drug manufacturer and distributor to notify the Directorate annually of the names of the drugs distributed by him along with a quantitative list of the medicinal ingredients, claims and directions for use.

For a number of years complaints have been received from consumers regarding deceptive practices in the packing of bacon. Early in 1966 meat packers agreed to redesign their bacon packages in order that the complete width of a random strip of bacon would be shown in a window extending along at least two-thirds of the length of the package. With the new packaging the consumer can now determine the proportion of lean to fat in the product.

Seventy prosecutions against violators of the Food and Drugs Act and Regulations were completed. Forty-five prosecutions involved foods, twenty-four involved drugs, and one action concerned the distribution of a device. The total fines assessed amounted to \$13,200.

Action was taken in a new area with two drug manufacturers being prosecuted for failure to maintain adequate control facilities in the manufacture of drugs. Five manufacturers were convicted for the manufacture and/or storage of food under unsanitary conditions. One prosecution action was successfully completed against a distributor for the sale of an electrical device as a treatment for numerous diseases.

One hundred and fifty-five seizures of foods, drugs, and devices, valued at \$281,710 were made during the year. Ninety-one seizures valued at \$33,211 were disposed of by destruction or some other acceptable means.

In addition to the seizures, quantities of foods and drugs were voluntarily destroyed by the owners since distribution would have violated the Food and Drugs Act and Regulations. One hundred and eight lots of such foods were valued at \$49,686 and ninety-nine lots of drugs valued at \$18,839.

#### Bureau of Scientific Advisory Services

The Bureau is responsible for the scientific appraisal of new human and veterinary drugs to determine efficacy and relative safety, and for the subsequent surveillance of drugs in use. Technical data are evaluated on pesticides, food additives, packaging materials and other substances used in the production, processing and handling of food for human use to prevent hazards to health. In addition, data on medical devices advertised to the public, and on substances used in the manufacture of cosmetics are evaluated.

The Bureau was reorganized into five functional divisions, namely, the Division of Medicine and Pharmacology, the Division of Veterinary Medicine, the Division of Standards, Pesticides and Additives, the Division of Toxicology and the Division of Submission and Manufacturing Control.

One hundred and eighty-one appraisals of human new drug submissions and one hundred and two supplemental submissions were completed with the acceptance of forty-four new drug submissions and thirty-one supplemental submissions. The Bureau completed one hundred and ninety-four appraisals of human investigational new drug submissions with the clearance of seventy-four submissions.

In the case of veterinary new drug submissions, thirty-three were appraised with the clearance of six submissions while ninety-seven preclinical veterinary new drug submissions were evaluated and seventeen submissions accepted.

One hundred and sixty-one pesticide submissions and two hundred and six submissions on food additives were evaluated. In addition, appraisals were completed on one hundred and thirty-four submissions on packaging material, two hundred and forty-three submissions on sanitizing agents, eighteen on cosmetics, four on medical devices and one hundred and twenty-four on miscellaneous products.

The Bureau published two hundred and forty-three approved methods of analysis and issued two hundred and forty-seven standard reference chemicals to analytical laboratories.

The response to the Drug Adverse Reaction Reporting Program by the physicians has been quite good with over five thousand reports received and evaluated in the Drug Alert System. However, it is clear that frequent reminders are required to maintain a high incidence of reporting.

Representatives of the contract hospitals met in Ottawa and reported progress in their research activities.

The Poison Control Program has received active support by the manufacturers of household substances and there has been a marked increase in the amount of information provided to the poison control centres. Five hundred and sixty-eight product cards were prepared.

A statistical report on accumulated poisoning reports during the period 1958-1964 was published. In 1964 there were twenty-three thousand three hundred and sixty-eight reports. In 1966 there were twenty-eight thousand six hundred and thirty-three reports processed.

#### Research Laboratories

The Research Laboratories are responsible for the research program of the Directorate. This includes the development of methods for the determination of drugs and of food constituents, including pesticides and food additives, nutrients and bacteriological contamination. It also involves the development of procedures for evaluating the safety of foods, drugs and cosmetics.

The Research Laboratories consist of five major Divisions - Food, Microbiology, Nutrition, Pharmaceutical Chemistry and Pharmacology. Each Division is headed by an internationally recognized expert in the field and is composed of several sections. In addition, there are two service



sections. The scientific work of the Directorate is widely recognized and many requests are received from scientists who wish to obtain training and experience in various specialized aspects of food and drug research. During the year, scientists have come for varying lengths of time from Chile, Indonesia and New Zealand. Three National Research Council Postdoctoral Fellows and one UNICEF Fellow carried out research in the laboratories. These training and research programs are financed by the institution to which the scientists are attached or by NRC or WHO.

Personnel from the laboratories have been asked to serve on numerous international committees and organizations. One scientist is on leave with FAO and another is setting up food and drug facilities in a foreign country. Other members of staff have served on expert committees or on short assignments with WHO, Food and Nutrition Board, American Academy of Pediatrics and similar organizations.

### Food Chemistry

The program on the pesticide residue in foods has been continued. New and extremely sensitive electronic detectors are being developed and evaluated. Enzyme systems from animal organs, resistant strains of insects and other sources have been studied and utilized in the development of sensitive methods for the detection of pesticides in foods and other types of biological media. Bioassay procedures have been improved and applied to the detection of pesticide residues. Human milk samples from several areas in Canada have been analyzed for pesticide residues. Metabolism studies of these compounds in plants and animals are continuing.

Fungicides have been screened in an attempt to develop a bioassay procedure for fungicides on foods and to discover a fungicide which might be used to prevent the growth of food borne moulds which may produce extremely toxic chemicals on foods.

In these studies moulds found on foods are grown on synthetic media and the media tested for toxic substances. Methods have been developed for the detection of ochratoxin and the aflatoxins simultaneously in food extracts. New methods are being developed for the detection of toxic chemicals produced during food processing or infestation by moulds, microorganisms, rodents and insects. A new bioassay procedure has been studied for the detection of the carcinogenic mould toxin-aflatoxin. The principle of the method depends on the observation that aflatoxin will prevent cell division but not nuclear division of fertilized eggs of some species of mollusca. Fertilized eggs of fish, insects and mammals are being investigated.

Compositional studies on meats, juices, jams and jellies have been carried out in an attempt to develop methods which will detect fraudulent practices. New methods are being developed for the many food additives in use. These include sugar alcohols, emulsifiers, stabilizers, antioxidants, preservatives, gums, flavours, etc. A new scheme of analyses is being developed for heavy metals which may enter the food supply as toxic organometallic compounds. These include such metals as lead, mercury, zinc, tin and arsenic.



## Microbiology

Studies of laboratory-developed E. coli strains, highly resistant to gamma irradiation, are being carried out to investigate the biochemistry of this resistance. This has involved studies of SH and SS linkage in protein, amino acid composition, protein synthesis, DNA composition, enzymes in pyrimidine synthesis, and amino acid requirements.

Electron microscope studies of these strains have shown changes in cell walls and cytoplasmic structure.

Staphylococcus enterotoxin A has been highly purified. A low molecular weight protein recovered from malted milk which caused food poisoning, and a similar protein from staphylococci isolated from the plant, is postulated as a previously unrecognized enterotoxin.

Lambs have been found to be suitable test animals for studying C. perfringens food poisoning. Typical symptoms were produced in lambs and humans by heat-resistant and heat-sensitive strains. The use of a peptone diluent was shown necessary for optimal recovery of C. perfringens from diverse sources.

A more sensitive procedure for determining Salmonella in meats was developed and is under test at Regional Laboratories. Application of the principle in the use of phenethyl B-D-galactopyranoside in the selective recovery of Salmonella from foods appears promising.

Toxic fungi have been isolated from a variety of foods, 3 being involved in food poisoning. An aflatoxin-producing Rhizopus and an ochratoxin A-producing Penicillium have been isolated from foods. Diverse food-borne fungi may have the ability to produce toxins and are currently under study.

Experiments are in progress to explain on a quantitative basis the effects of salt, curing agents and heat on outgrowth of spores of C. botulinum.

## Nutrition

The limiting of amino acid was measured in 12 practical cereal-based diets by means of their effect on plasma amino acids. The efficacy of lysine supplementation of such diets was also measured. It was concluded that lysine supplementation of cereal diets was not generally useful unless other deficiencies (e.g., threonine) are simultaneously corrected. Plasma amino acid levels were also used to measure the essential amino acid requirement of the young rat as a preliminary to applying this technique to larger animals and humans.

A method suitable for the simultaneous assay of ascorbic acid, dehydroascorbic acid and isoascorbic acid was developed and applied to various biological material in a study of ascorbic acid metabolism. The assessment of accelerated storage tests for the prediction of vitamin stability was continued.

The potential hazard of the conversion of nitrate in vegetables to nitrite was investigated. Fresh, canned and frozen spinach was stored under various conditions and the nitrate/nitrite content measured. Only in fresh spinach stored in the cold for long periods was there any accumulation of nitrite. At room temperature nitrate content decreased rapidly but nitrite did not increase greatly. Insignificant amounts of nitrite were present in all samples as purchased and was not formed to an appreciable extent in frozen, canned or baby food spinach.

The effects of several hypocholesterolemic drugs on the metabolism of vitamin A and ubiquinone were studied in the rat, as were the effects of agents designed to reduce fat absorption. None were found to influence vitamin A metabolism. Ubiquinone levels were increased by clofibrate but this did not alter succinoxidase activity. A new metabolite of vitamin A was isolated, which was converted to vitamin A<sub>2</sub> by the rat.

A study of the non-saponifiable constituents of human liver was initiated as part of an assessment of the nutritional status of Canadians in health and disease. Preliminary studies were aimed at methodology and the distribution of constituents in various areas of the liver.

The tuber oil, *Cyperus esculentes*, a potentially important Canadian dietary oil, was examined and found to resemble olive oil in composition and nutritional properties. Canadian margarines were examined for their content of biologically active, polyunsaturated fatty acids.

## Pharmaceutical Chemistry

Investigations were continued on the development of selective methods for the quantitative determination of drugs in pharmaceutical dosage forms. Colorimetric procedures were established for several anti-depressant and oral antidiabetic drugs while the acid-dye technique was investigated further as a general method for the screening of pharmaceuticals. Specific procedures were studied for pyrvinium pamoate and vancomycin hydrochloride. Gas-liquid chromatographic analysis was investigated for its application to analgesic preparations, and a program on polarographic analyses was initiated. Examination of preparations purported to contain pangamic acid (Vitamin B<sub>15</sub>) showed that all were mixtures of two or three constituents, and that such preparations are to be classified as new drugs under the present regulations.

A survey of methods and specifications occurring in various pharmacopoeias revealed the existence of many differences and emphasized the need for closer cooperation among regulatory agencies to establish more uniform standards. A continuing program of bulk drug examination was initiated, and although all products tested met official specifications, trace amounts of impurities were found in most specimens.

A survey was made of natural products used in proprietary or patent medicines. Many botanical drugs used in the formulation of these dosage forms have never been subjected to close chemical and pharmacological scrutiny, and hence, a program of research was initiated for the study of such products. A gas chromatographic method was developed permitting



the identification of trace amounts of LSD in pharmaceutical preparations and applied successfully for the detection of minute amounts of the hallucinogenic drug in samples seized by Food and Drug Inspectors and officers of the R.C.M.P. Further investigations were made into the chemistry and composition of morning glory seeds, opium and essential oils. New alkaloids and terpenoids have been isolated and characterized.

Investigations have also been made on the physicochemical and structural properties of drugs in solution, in the pure solid state, and in combination with other solids in dosage forms. These investigations are directed towards measuring the dissolution rate of a drug substance from a dosage form into simulated gastrointestinal fluid, the objective being to correlate these rates with physiological availability.

### Pharmacology

When given to rats, nordihydroguaiaretic acid (NDGA), a substance used to prevent rancidity in fats and oils, was found to interfere with drainage from the lymph nodes, resulting in formation of fluid-filled cysts. NDGA, and metabolites thereof, also accumulated in the cells of the kidney and caused degenerative changes.

In the rat, cobalt caused marked changes in the heart muscle, characterized by an accumulation of fluid between muscle fibres, fragmentation of muscle fibres, accumulation of fat in myocardial cells, and ultimate death of some fibres. Biochemical studies indicated that cobalt reduced the ability of heart muscle cells to utilize oxygen.

Chick embryos were found to be very sensitive to the toxic effects of organophosphorus pesticides, injected into the egg on the tenth day of incubation. The lesions produced included curvature of the spine and abnormalities of the skull.

When acetylsalicylic acid and barbiturates were given in combination to rats, they were more toxic than when given alone. The animals given the combination of the two drugs had higher total and free plasma and brain salicylate levels than those given acetylsalicylic acid without barbiturate.

In view of the possibility that administration during pregnancy of drugs affecting the central nervous system might modify the learning ability of the offspring, studies were conducted on the behaviour of rats whose mothers had been treated with a tranquilizer, a sedative or a stimulant during pregnancy. These treatments did not alter the spontaneous motor activity or maze-learning ability of the offspring.

Serum cholinesterase levels in the rabbit were significantly reduced following hemorrhage. Preliminary results indicated that hemorrhage also caused reduction of serum cholinesterase levels in human subjects.

Investigation of the drug-metabolizing activity of human placental tissue indicated that the placenta can metabolize barbiturates and amphetamines at significant rates.

Cobalt decreased the contractility of isolated rat heart without depressing high energy phosphate levels while the increased contractility produced by noradrenaline was followed by a decrease in high energy phosphate levels.

In continued studies on pharmacologic effects of sympathomimetic amines, it was found that dexamphetamine and related compounds act on smooth muscle in a way similar to that of noradrenaline, and different than the action produced by 5-hydroxytryptamine.

An antiserum was prepared from rabbits which is apparently specific for follicle stimulating hormone, (FSH). The antiserum is being used in development of a sensitive analytical method for determining FSH in hormone products.

Work has continued on the synthesis of new steroids and the determination of their chemical and biological activity. These studies are leading towards a better understanding of the biological effects of steroid drugs.

Improved gas chromatographic techniques were devised for the analysis of oral contraceptives, and successfully applied to commercially available products. Preliminary evidence obtained with a radioactively-labelled contraceptive steroid indicated that the compound or its metabolites accumulates in the liver, kidney and adrenal glands.

Methenamine (hexamethylenetetramine), a urinary antiseptic, was found to break down to a considerable extent when added to homogenates of liver, kidney and brain tissue at physiological pH values. When Methenamine was given orally to rats, free formaldehyde was detected in various tissues.

A rapid and sensitive method was developed for the determination of dichlorodiphenylacetic acid (DNA), the principal urinary metabolite of DDT in mammals.

The antibiotics Spiramycin, Almarcetin and Gentamycin were found to inhibit incorporation of the amino acid phenylalanine into protein. Acquired resistance to Chloramphenicol and Almarcetin was found to be caused by changes in permeability of the bacterial cell wall.

Allopurinol [(4-hydroxypyrazolo-3,4,-d) pyrimidine], a drug used in the treatment of gout, was found to be a potent inhibitor of the enzyme tryptophan pyrrolase. Plasma tryptophan levels in rats, however, were unaltered by Allopurinol administration.

## Biometrics

The Biometrics Section has provided statistical advice and service to many units of the Directorate. Consulting statisticians have assisted in the evaluation of experimental data from the Research Laboratories.



Collaborative assay and check sample determinations collected by the Bureau of Operations have been statistically analyzed. The section has also assisted in the statistical evaluation of clinical trials and other data submitted to the Bureau of Scientific Advisory Services.

### Experimental Animals

This section is responsible for the procurement, care and maintenance of all animals required for research projects by the Research Laboratories. The facility housed dogs, cats, guinea pigs, pigeons and rabbits as well as raising approximately 11,500 rats and 7,000 mice.

Necropsies, parasitology and bacteriological diagnostic procedures in order to establish and maintain a healthy colony were conducted in the animal disease diagnostic laboratory. Regular routine appraisals of the health of all animals were made and assistance was given in surgical procedures required for research projects. Advice on facilities, breeding and other problems which involved laboratory animals was provided.

Investigations were carried out on animal diseases, as well as conducting cooperative research projects with other areas of the Research Laboratories.

### Narcotic Control Division

The Division continued to maintain the required control over both Narcotic and Controlled Drugs without interference with the necessary distribution of supplies for medical purposes.

During the year 1966 firms were licensed to deal in narcotics and 286 in controlled drugs. In both cases over half the number of dealers were authorized to manufacture or sell under their own label, pharmaceutical products containing these drugs within the limits of their business.

### Domestic Control

One noticeable development of 1966 was the increased number of marihuana cases as shown by the following figures:

|                              | <u>Male</u> | <u>Female</u> | <u>Total</u> |
|------------------------------|-------------|---------------|--------------|
| Cases first recorded in 1962 | 15          | 9             | 24           |
| " 1963                       | 50          | 29            | 79           |
| " 1964                       | 36          | 18            | 54           |
| " 1965                       | 100         | 39            | 139          |
| " 1966                       | 301         | 110           | 411          |

These cases involved persons as young as 15 years, and include several persons responsible for the teaching and guidance of our youth. The largest number were in the 20 to 24-year-old age group - the "experience seekers". A disturbing factor has been the verbal acceptance of this trend by some educators.

There continues to be the problem of persons attending drug addiction centres and receiving regular treatment, while obtaining illicit supplies of heroin and drugs obtained on prescriptions issued by doctors not associated with the centre concerned. On one occasion in 1966, 25 instances of persons obtaining narcotics from more than one practitioner were being investigated by the R.C.M.P. Some of these resulted in convictions. Many of these persons present the problem of dual-addiction, that is, habituation to both opiates and controlled drugs, with the narcotic, usually Methadone, being supplied by a treatment centre and the controlled drug, usually a short-acting barbiturate, being prescribed by an outside practitioner.

As it is most necessary that a person or institution treating an addict have complete control over the amount and kind of drug the individual is obtaining, this points up the necessity for treatment at a recognized treatment centre only. It also means continuous scrutiny must be given to retail pharmacy narcotic and controlled drug sales' reports to keep a close check on the situation so that treatment centres can be advised when their patients are cheating.

There continues to be a large number of cases of forgery of prescriptions and of persons using aliases and different addresses to obtain drugs. Every effort is being made to curtail this activity.

During the year 273 new cases of narcotic addiction were reported, with 124 old cases being deleted because of death, deportation or inactivity of the addict concerned. The overall addict total increased from 3573 in 1965 to 3592 in 1966. A number of cases, formerly listed in the statistics as marihuana cases were deleted, as marihuana cases, and are now included in the statistics under the following headings: Street addicts - 3182; Medical addicts - 259; Professional addicts - 151.

The overall addict totals for the past six years are as follows:

|            |      |            |      |
|------------|------|------------|------|
| 1961 ..... | 3395 | 1964 ..... | 3352 |
| 1962 ..... | 3576 | 1965 ..... | 3573 |
| 1963 ..... | 3355 | 1966 ..... | 3592 |

Statistics

Import and consumption statistics in respect to narcotics are set forth on appended tables as also imports and exports of controlled drugs.

Convictions

Heroin continues to be the main drug of addiction in the narcotic field. Of a total of 447 convictions registered during the year in question, 221 or over 49% involved this drug. Of significance is the fact that 144 convictions involved the illicit use or distribution of marihuana. This figure compared with 60 in 1965 and 37 in 1963 will serve to demonstrate the increasing problem being experienced with marihuana. It is apparent that the problem occurs chiefly among the younger age groups.



Of the 447 convictions, 378 were for illegal possession, 32 for trafficking, 33 for possession for the purpose of trafficking, 1 for illegal import, 1 for illegal cultivation and 2 under the regulations in respect to securing prescriptions from more than one physician.

In addition, 12 convictions were registered under Part III of the Food and Drugs Act, 6 for trafficking and 6 for possession for the purposes of trafficking.

The type of controlled drug found on the illicit market is usually obtained by theft and misuse of, or forgery of prescriptions. In this latter context, 9 convictions were registered under the Criminal Code of Canada.

#### Liaison with the Medical, Pharmaceutical and Related Professions

The Division extends to and receives from Registrars of the related professions all possible cooperation. As a result it is possible to maintain records as to the status of individual members of the professions with their Provincial Colleges and when necessary, information of interest is supplied to the Registrars. This exchange of information has in many instances been the enabling factor in resolving problems faced by professional people.

#### Inspectional Work

As a result of work done by 16 Inspectors in the field, 212 licensed dealers' premises were inspected resulting in 155 narcotic and 186 controlled drug audits being completed. In addition 2271 retail pharmacies and 999 hospitals were inspected and 2734 special interviews were held by these Inspectors.

TABLE 1

CONVICTIONS UNDER THE NARCOTIC CONTROL ACT DURING THE CALENDAR YEAR 1966

| Province | 3(1) | 4(1) | 4(2) | 5(1) | 6(1) | Reg's<br>3(3) | Total | Heroin | Morphine | Cod-<br>eine | Cocaine | Marihuana | Pimin-<br>odine | Dil-<br>audid | Meth-<br>adone | Aniler-<br>idine | Levo-<br>dromoran | Peth-<br>idine | Poppy<br>head | Total |
|----------|------|------|------|------|------|---------------|-------|--------|----------|--------------|---------|-----------|-----------------|---------------|----------------|------------------|-------------------|----------------|---------------|-------|
| Nfld.    | -    | -    | -    | -    | -    | -             | -     | -      | -        | -            | -       | -         | -               | -             | -              | -                | -                 | -              | -             | -     |
| P.E.I.   | -    | -    | -    | -    | -    | -             | -     | -      | -        | -            | -       | -         | -               | -             | -              | -                | -                 | -              | -             | -     |
| N.S.     | 1    | -    | -    | -    | -    | -             | 1     | -      | -        | -            | -       | 1         | -               | -             | -              | -                | -                 | -              | -             | 1     |
| N.B.     | 4    | -    | -    | -    | -    | -             | 4     | -      | -        | -            | -       | 3         | -               | -             | -              | -                | -                 | 1              | -             | 4     |
| Que.     | *37  | 8    | *11  | -    | 1    | 1             | 58    | 14     | 4        | 6            | -       | 30        | -               | -             | -              | -                | 1                 | 3              | -             | 58    |
| Ont.     | *111 | 23   | 13   | 1    | -    | -             | 148   | 24     | 10       | 2            | -       | 85        | 15              | 1             | -              | 3                | -                 | 8              | -             | 148   |
| Man.     | 6    | -    | -    | -    | -    | -             | 6     | 2      | 3        | -            | -       | -         | -               | -             | 1              | -                | -                 | -              | -             | 6     |
| Sask.    | 6    | -    | -    | -    | -    | -             | 6     | 1      | -        | 1            | -       | -         | -               | -             | -              | -                | 1                 | 3              | -             | 6     |
| Alta.    | 12   | -    | -    | -    | -    | 1             | 13    | 2      | 3        | 1            | -       | 3         | 1               | -             | -              | 1                | -                 | 2              | -             | 13    |
| B.C.     | *201 | 1    | 9    | -    | -    | -             | 211   | 178    | 2        | -            | 1       | 22        | -               | 1             | 2              | -                | -                 | 4              | 1             | 211   |
| TOTAL    | 378  | 32   | 33   | 1    | 1    | 2             | 447   | 221    | 22       | 10           | 1       | 144       | 16              | 2             | 3              | 4                | 2                 | 21             | 1             | 447   |

Of the above there were 3 males and 2 females with two convictions in Quebec, 8 males and 2 females with two convictions, 3 males with three convictions and 2 males with four convictions in Ontario, 1 male with two convictions in Saskatchewan, 1 male with two convictions in Alberta, and 4 males and 2 females with two convictions in British Columbia.

Included in the above, there was 1 male with one conviction in Saskatchewan and one conviction in Alberta, as well as 1 male with one conviction in Alberta and one in British Columbia.

\* 6 Juvenile court cases.

- N.C. Act
- 3(1) - Possession

4(1) - Trafficking

4(2) - Possession for purpose of Trafficking

5(1) - Importing

6(1) - Cultivating

3(3) - Regulations



TABLE 2

IMPORTS OF MAIN NARCOTICS FOR PERIOD 1957 - 1966 INCLUSIVE

| Unit of Weight - Kg. Pure |                    |          |              |                |            |          |                |         |             |               |             |           |           |
|---------------------------|--------------------|----------|--------------|----------------|------------|----------|----------------|---------|-------------|---------------|-------------|-----------|-----------|
| Year                      | Opium preparations | Morphine | Hydro-codone | Hydro-morphine | Oxy-codone | Codeine  | Ethyl-morphine | Cocaine | Anileridine | Alpha-prodine | Levorphanol | Methadone | Pethidine |
| 1957                      | 90.902             | 30.857   | 20.013       | 0.355          | 5.080      | 2039.416 | 19.941         | 31.536  | 0.149       | 5.548         | 0.353       | 6.489     | 534.702   |
| 1958                      | 108.864            | 28.342   | 33.338       | 0.174          | 4.459      | 2445.569 | 19.978         | 33.474  | 55.836      | 4.488         | 0.414       | 6.788     | 407.728   |
| 1959                      | 111.630            | 35.094   | 15.282       | 0.267          | 7.827      | 2813.256 | 21.036         | 19.482  | 14.069      | 5.984         | 0.330       | 4.063     | 546.189   |
| 1960                      | 117.596            | 44.889   | 18.588       | 0.053          | 4.754      | 3039.153 | 14.032         | 31.257  | 15.220      | 3.344         | 0.302       | 3.236     | 636.840   |
| 1961                      | 141.977            | 44.356   | 27.639       | 0.320          | 6.567      | 2995.255 | 12.907         | 30.462  | 21.754      | 3.411         | 0.320       | 4.294     | 666.420   |
| 1962                      | 145.152            | 40.063   | 36.814       | 0.481          | 7.931      | 2816.950 | 26.485         | 26.486  | 22.958      | 4.853         | 0.370       | 2.696     | 491.716   |
| 1963                      | 127.008            | 47.184   | 35.337       | 0.001          | 8.804      | 3289.241 | 22.768         | 24.994  | 20.500      | 4.709         | 0.558       | 2.879     | 650.336   |
| 1964                      | 136.080            | 35.362   | 39.381       | 0.278          | 15.723     | 3547.079 | 19.537         | 28.706  | 28.500      | 4.822         | 0.355       | 3.333     | 635.165   |
| 1965                      | 138.268            | 35.119   | 48.605       | 0.230          | 17.480     | 3460.703 | 12.994         | 31.705  | 31.600      | 5.296         | 0.257       | 6.309     | 785.175   |
| 1966                      | 150.571            | 27.538   | 54.258       | 0.303          | 17.311     | 3692.948 | 35.956         | 28.054  | 33.910      | 3.232         | 0.372       | 2.692     | 711.751   |

TABLE 3

ESTIMATED CONSUMPTION OF THE MAIN NARCOTICS FOR THE PERIOD 1957 - 1966 INCLUSIVE

| Unit of Weight - Kg. Pure |                    |          |              |                |            |          |                |         |             |               |             |           |           |
|---------------------------|--------------------|----------|--------------|----------------|------------|----------|----------------|---------|-------------|---------------|-------------|-----------|-----------|
| Year                      | Opium preparations | Morphine | Hydro-codone | Hydro-morphine | Oxy-codone | Codeine  | Ethyl-morphine | Cocaine | Anileridine | Alpha-prodine | Levorphanol | Methadone | Pethidine |
| 1957                      | 112.519            | 43.348   | 20.858       | 0.319          | 4.749      | 2407.116 | 30.284         | 31.921  | 0.037       | 5.945         | 0.413       | 5.583     | 333.078   |
| 1958                      | 140.819            | 44.645   | 19.918       | 0.245          | 4.143      | 2501.709 | 27.966         | 30.188  | 30.204      | 3.634         | 0.355       | 6.768     | 406.990   |
| 1959                      | 157.120            | 36.373   | 22.325       | 0.270          | 5.847      | 2571.228 | 25.825         | 31.171  | 19.286      | 4.977         | 0.335       | 5.290     | 547.115   |
| 1960                      | 140.551            | 41.912   | 20.274       | 0.206          | 5.203      | 2675.452 | 18.485         | 30.514  | 24.619      | 4.262         | 0.355       | 3.487     | 637.941   |
| 1961                      | 109.906            | 43.743   | 25.168       | 0.155          | 6.276      | 2800.388 | 17.137         | 29.252  | 20.291      | 3.931         | 0.437       | 5.562     | 472.076   |
| 1962                      | 137.739            | 44.571   | 27.359       | 0.194          | 8.599      | 3334.749 | 24.154         | 31.306  | 24.877      | 4.233         | 0.274       | 3.324     | 605.168   |
| 1963                      | 132.603            | 52.151   | 41.762       | 0.422          | 8.649      | 2899.046 | 19.414         | 28.644  | 24.828      | 4.086         | 0.366       | 3.571     | 592.603   |
| 1964                      | 182.033            | 37.129   | 32.467       | 0.365          | 10.379     | 3391.992 | 17.369         | 28.453  | 24.377      | 4.441         | 0.340       | 4.115     | 720.286   |
| 1965                      | 71.882             | 37.502   | 49.528       | 0.173          | 18.760     | 3683.273 | 16.194         | 32.627  | 32.522      | 4.281         | 0.354       | 4.175     | 689.141   |
| 1966                      | 165.283            | 26.214   | 48.699       | 0.279          | 13.024     | 4242.347 | 17.390         | 28.137  | 30.669      | 3.048         | 0.358       | 4.353     | 723.090   |



TABLE 4

## CONDENSED - CONTROLLED DRUG EXPORTS FOR 1966

| Unit of Weight - Kg.                          |          |          |                   |              |          |
|-----------------------------------------------|----------|----------|-------------------|--------------|----------|
| Drug                                          | Bulk     | Finished | Straight<br>Total | Preparations | Total    |
| Amphetamine                                   | -        | 14.160   | 14.160            | 10.119       | 24.279   |
| Methamphetamine                               | .806     | -        | .806              | -            | .806     |
| Benzphetamine                                 | -        | -        | -                 | -            | -        |
| Barbituric Acid and its salts and derivatives |          |          |                   |              |          |
| Short Acting                                  | 1032.748 | 26.166   | 1058.914          | 8.729        | 1067.643 |
| Intermediate                                  | 650.000  | 38.119   | 688.119           | 4.115        | 692.234  |
| Long Acting                                   | -        | 83.071   | 83.071            | 65.125       | 148.196  |
| TOTAL                                         | 1682.748 | 147.356  | 1830.104          | 77.969       | 1908.073 |

TABLE 5

## CONDENSED - CONTROLLED DRUG IMPORTS FOR 1966

| Unit of Weight - Kg.                          |           |          |                   |              |           |
|-----------------------------------------------|-----------|----------|-------------------|--------------|-----------|
| Drug                                          | Bulk      | Finished | Straight<br>Total | Preparations | Total     |
| Amphetamine                                   | 802.797   | 183.132  | 985.929           | 3.783        | 989.712   |
| Methamphetamine                               | 59.556    | 5.689    | 65.245            | .300         | 65.545.   |
| Benzphetamine                                 | 0.010     | 7.503    | 7.513             | -            | 7.513     |
| Barbituric Acid and its salts and derivatives |           |          |                   |              |           |
| Short Acting                                  | 9462.976  | 282.263  | 9745.239          | 81.734       | 9826.973  |
| Intermediate                                  | 8624.637  | 841.834  | 9466.971          | 66.658       | 9533.129  |
| Long Acting                                   | 9709.706  | 503.723  | 10213.429         | 337.745      | 10551.174 |
| TOTAL                                         | 27797.319 | 1627.820 | 29425.639         | 486.137      | 29911.276 |





## HEALTH SERVICES BRANCH

### Introduction

The Program of the Health Services Branch was carried out by its component divisions and sections which are: Aerospace Medicine and Safety, Child and Maternal Health, Dental Health, Emergency Health Services, Epidemiology, Health Education, Laboratory of Hygiene, Medical Rehabilitation, Mental Health, Nursing Advisory Service, Nutrition, Occupational Health, Public Health Engineering, Radiation Protection, and Research Development. From September 1966, the Director General was on leave of absence, attending Laval University for the purpose of acquiring greater facility in the use of the French language. The Deputy Director General was Acting Director General during this period.

The Health Services Branch is responsible for the provision of consultant and advisory services to the provinces in the development of their special health services and to other branches of the Department of National Health and Welfare and other federal Government Departments. It co-operates with the provinces in the conduct of studies and surveys and provides reference laboratory services to the provinces and the other federal Government branches and departments through the Laboratory of Hygiene and the Occupational Health, Public Health Engineering and Radiation Protection Divisions. Intramural research in divisions within the Health Services Branch and the assessment and co-ordination of extramural research related to health services continue to form an important part of the activities of the Health Services Branch. The Health Services Branch continues also to have obligations arising from the provisions of legislation such as the Public Works Health Act, the Atomic Energy Control Act, the Blind Persons Act, and the Civil Emergency Measures Planning Order (P.C. 1965-1041) and international responsibilities related to Canada's role on the International Joint Commission and various agencies of the United Nations concerned with the promotion of health, including the Food and Agriculture Organization.

On October 19, 1966, the Minister officially opened the Environmental Health Centre, situated immediately east of the Brooke Claxton Building, Tunney's Pasture, Ottawa. The Centre houses the Occupational Health Division, the Public Health Engineering Division, and the Aerospace Medicine and Safety Section.

Water pollution remains a problem of major concern. Members of the Health Services Branch continue to serve on boards advisory in this matter to the International Joint Commission. Pollution studies arising from commitments to the International Joint Commission and involving members of the professional and technical staff of the Branch during the year under review concerned the Great Lakes and connecting channels and the St. Croix, Rainy and Red Rivers. Water pollution studies were also conducted as part of the shellfish control program under the provisions of the 1948 Canadian-United States bilateral agreement. In addition, technical and advisory services were provided to the Atlantic Development Board in

connection with its water resources survey in the Atlantic Provinces. Officers of the Health Services Branch co-operated as well with the Port Health Advisory Committee at Montreal in its program for the control of water pollution and other environmental health problems associated with the 1967 International and Universal World Exhibition.

Through the development of educational materials and the support of epidemiological and motivational research, the Branch continued to co-operate with provincial health and education authorities in the effort to eliminate or reduce the health hazards associated with the cigarette smoking habit. In particular, a coloured animated film directed primarily to young people of high school and university age and a brochure for the use of physicians in counselling their patients received many favourable comments.

Meetings of special interest convened by the Department during the year included a Federal-Provincial Conference on Local Health Services in April 1966, attended by directors of local health services from eight provinces and representatives of the federal Department; a National Conference on Epilepsy in November 1966, attended by physicians especially concerned with this health problem, as well as representatives of provincial departments of public health, of interested voluntary associations and of the Department of National Health and Welfare; and the first National Conference on Maternal and Child Health in March 1967, which it is considered provided a valuable service in bringing together clinicians and public health physicians, nurses and administrators.

Developments in the specific health fields with which the Health Services Branch is particularly concerned are discussed at greater length in the succeeding sections of this annual report.



## PLANNING AND EVALUATION

A major concern and activity of the Consultant for Planning and Evaluation was his contribution to the development of the new organization and program for the Health Services Branch and to the application of Treasury Board program budgeting procedures to the Branch. Management practices and procedures with particular reference to personnel management, including classification revision, collective bargaining, and training requirements also received attention. The Consultant participated in the development and application of the Program Review procedure within the Branch and was particularly involved, with the Smoking and Health Program, the development of a surveillance system for congenital anomalies, and some aspects of environmental health programs.

During the year the Consultant for Planning and Evaluation provided advisory and appraisal services in connection with projects and proposals, including submissions under the Public Health Research Grant. He continued to serve as chairman of the Health Services Subcommittee of the Public Health Research Advisory Committee. This officer was also Consultant to the Canadian Public Health Association Research Committee, and was asked to be a member of the Committee on Health Statistics of the Ontario Health Council. He participated in meetings of both committees during the year. The Consultant presented a paper on "Need and Opportunity for Public Health Research" at the Canadian Public Health Association Annual Meeting in Quebec City. He also delivered a lecture on "Demography, Biostatistics, and Epidemiology" to the Hospital Administration class at the University of Ottawa. The Consultant for Planning and Evaluation participated in the Conference on Epilepsy, the Maternal and Child Health Conference, and the Conference on Local Health Services. He also attended the National Health Forum and a Health Services Research Conference in New York.

## NURSING ADVISORY SERVICE

The primary functions of the Nursing Advisory Service Unit are: to provide an advisory service in the broad general field of nursing to the Department; to provide consultant service to other government departments and the provinces on a request basis; and to maintain a liaison between the Department and the organized nursing profession at national level.

Two major developments during the year under review affected the program of the unit: the retirement of the Chief Nursing Consultant in January 1967; and the assignment of the Public Health Nursing Consultant to an international project for a four month period.

### Service to the Department

#### National Health Grants

As part of its advisory service to the Department the unit reviewed applications for national health grants which were in the field of nursing or which had a nursing component.

### International Health

The unit cooperated with the Principal Medical Officer of this Division in reviewing requests from World Health Organization and the External Aid Office for educational programs and observation visits for nurses from other countries.

A three month program of observation of Canadian nursing was arranged by the unit for the Chief Public Health Nurse of Ghana and the Chief Nursing Matron of Malaya.

### Service to Other Departments

Consultation service has been provided throughout the year to the External Aid Office in relation to: the review of applications for selection of Canadian nurses for technical aid positions abroad; and the follow-up of foreign nursing students studying at Canadian universities under the Colombo Plan.

### Service to the Provinces

Consultation service has been given on request to various provinces in addition to the evaluation of public health nursing programs in two provinces, and the presentation of papers at nursing conferences, institutes and university schools of nursing.

### Liaison with the Organized Nursing Profession

Both staff members have been active on many committees of national nursing and related health organizations. In addition, the Chief Nursing



Consultant acted as resource person to the National Conference on Aging, and to a series of four regional conferences conducted by the Canadian Nurses' Association for the consideration of Higher Education in Nursing.

#### Other Activities

The Public Health Nursing Consultant was loaned at the request of W.H.O. to serve as a member of a national health planning team in Libya, North Africa. Her specific responsibility was to examine nursing service, education and manpower, in relation to the health situation in that country, and as a member of the team, to assist the national government in preparing a five year plan of action.

This unit is interested in establishing standards for the improvement of nursing in Canada. The Public Health Nursing Consultant assisted with the preparation and execution of a project for preparing a statement on the functions and qualifications for the practice of public health nursing in Canada. The report was published by the Canadian Public Health Association in March, 1967.

Owing to the retirement of the Chief Nursing Consultant it was necessary to postpone two important programs: the Federal Provincial Nursing Conference which was due in January, 1967; and the annual visit to the Department of student bodies from several university schools of nursing.

As of March 31, 1967, no appointment has been made to the Chief Nursing Consultant position.



## RESEARCH DEVELOPMENT

The Research Development Section coordinates the Department's scientific and medical research program and maintains liaison with other federal government and national voluntary agencies which support research. Independent scientific appraisal of applications for research grants is arranged and contact is maintained with recipients of such grants on technical aspects of their projects. Research grants under this program are made on the basis of projects applied to a defined program of interest to provincial and federal public health services and are related to the "burden of disease" in Canada. Studies are conducted to aid in defining these diseases and the services involved. Emphasis is placed on:

- a) Prevention of disease or disability;
- b) Operational or administrative studies;
- c) Epidemiological studies of diseases and conditions of general public health importance, and of the natural history of diseases;
- d) Studies aimed at finding solutions to problems in the fields of Occupational Health, Environmental Health, Sanitation, and Public Health Engineering.

Research positions in Epidemiology, Biometrics and Biostatistics were awarded to five incumbents. These positions are intended to relieve the present shortage of trained epidemiologists in Canada and ultimately to improve the quality of the statistical control and analysis of research projects.

This research program is distinguished by its application to established Canadian needs and health services as sponsored by provincial and national health departments.

### TOTAL ASSISTANCE FOR RESEARCH, 1966-67

A total of \$8,710,430 was available for the combination of intramural research activities and extramural research assisted by the Public Health Research Grant.

### INTRAMURAL RESEARCH

All departmental laboratories which have statutory functions as well as many technical divisions carry out research related to their specific functions. Estimates provided by the reporting units indicate a total intramural research budget of \$4,209,100 which is an increase of about \$1,380,000 over that for 1965-66.

EXTRAMURAL RESEARCH

Since the beginning of the fiscal year 1965-66, national health grant research funds have been consolidated under the Public Health Research Grant. This is a pooled grant on a non-sharing basis and is not allocated in specific amounts to provinces. It is calculated at 23 cents per head of population, making \$4,501,330 available for research projects in 1966-67. This was augmented by special transfers from other grants by certain provinces for purposes such as cancer research.

Departments of hospitals or universities and names of special institutes or public health agencies which received funds under the Public Health Research Grant in 1966-67 and the amount of support by field of investigation are shown in accompanying tables.

Another table shows the distribution of funds according to the International Statistical List of Diseases, Injuries, and Causes of Death, with two additional categories: "Diverse Disease Entities" and "No Disease Entity Involved". The latter category in the case of public health research is largely confined to administrative research.

TABLE 6  
SUMMARY OF INTRAMURAL RESEARCH PROGRAM -- 1966-67

| REPORTING UNIT AND TYPE OF COST                                      | Estimated<br>Research<br>Budget:<br>In \$(ooo's) | Per Cent<br>of Total<br>for<br>Department |
|----------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------|
| <u>HEALTH ORGANIZATION</u>                                           |                                                  |                                           |
| <u>FOOD AND DRUG BRANCH:</u>                                         |                                                  |                                           |
| Research and Development Costs .....                                 | 1,623.0                                          | 38.6                                      |
| <u>HEALTH SERVICES BRANCH:</u>                                       |                                                  |                                           |
| <u>Research and Development Costs</u>                                |                                                  |                                           |
| Emergency Health Services.....                                       | 11.0                                             | 0.2                                       |
| Laboratory of Hygiene .....                                          | 455.0                                            | 10.8                                      |
| Occupational Health .....                                            | 432.5                                            | 10.3                                      |
| Radiation Protection.....                                            | 487.0                                            | 11.6                                      |
| Nutrition .....                                                      | 20.0                                             | 0.5                                       |
| Public Health Engineering.....                                       | 200.0                                            | 4.7                                       |
| Sub-total.....                                                       | 1,605.5                                          | 38.1                                      |
| <u>Scientific Data Collection Costs</u>                              |                                                  |                                           |
| Epidemiology .....                                                   | 79.5                                             | 1.9                                       |
| Dental Health .....                                                  | 17.0                                             | 0.4                                       |
| Medical Rehabilitation .....                                         | 31.0                                             | 0.7                                       |
| Sub-total.....                                                       | 127.5                                            | 3.0                                       |
| TOTAL HEALTH SERVICES BRANCH                                         | 1,733.0                                          | 41.1                                      |
| <u>HOSPITAL INSURANCE AND RESOURCES BRANCH:</u>                      |                                                  |                                           |
| <u>Scientific Data Collection Cost ,</u>                             |                                                  |                                           |
| Health Facilities Design .....                                       | 23.4                                             | 0.6                                       |
| Health Resources..... )                                              | 72.7                                             | 1.7                                       |
| Hospital Insurance and Diagnostic Services..... )                    |                                                  |                                           |
| Medical Care Insurance..... )                                        |                                                  |                                           |
| Sub-total .....                                                      | 96.1                                             | 2.3                                       |
| TOTAL HOSPITAL INSURANCE AND RESOURCES BRANCH                        | 96.1                                             | 2.3                                       |
| <u>MEDICAL SERVICES BRANCH:</u>                                      |                                                  |                                           |
| Research and Development Costs .....                                 | 175.0                                            | 4.2                                       |
| TOTAL HEALTH ORGANIZATION                                            | 3,627.1                                          | 86.2                                      |
| <u>ADMINISTRATION BRANCH:</u>                                        |                                                  |                                           |
| <u>Scientific Information Costs</u>                                  |                                                  |                                           |
| Library .....                                                        | 107.0                                            | 2.5                                       |
| <u>Scientific Data Collection Costs</u>                              |                                                  |                                           |
| Research and Statistics .....                                        | 475.0                                            | 11.3                                      |
| TOTAL ADMINISTRATION BRANCH                                          | 582.0                                            | 13.8                                      |
| <u>HEALTH ORGANIZATION AND ADMINISTRATION BRANCH:</u>                |                                                  |                                           |
| Total Research and Development Costs .....                           | 3,403.5                                          | 80.9                                      |
| Total Scientific Data Collection Costs .....                         | 698.6                                            | 16.6                                      |
| Total Scientific Information Costs .....                             | 107.0                                            | 2.5                                       |
| TOTAL INTRAMURAL RESEARCH COSTS ESTIMATED<br>FOR THE DEPARTMENT..... | 4,209.1                                          | 100.0                                     |

NOTE: Figures are from Survey carried out in Summer of 1966.



TABLE 7

DISTRIBUTION OF RESEARCH FUNDS UNDER NATIONAL HEALTH GRANTS  
TO DEPARTMENTS OF UNIVERSITIES, HOSPITALS, ETC. -- 1966-67

| Code No. | Department                                    | Number of Projects | Amount \$ | Amount as % of Total |
|----------|-----------------------------------------------|--------------------|-----------|----------------------|
| 1        | Allergy                                       | --                 | --        | --                   |
| 2        | Anaesthesia                                   | 3                  | 23,100    | 0.6                  |
| 3        | Anatomy                                       | --                 | --        | --                   |
| 4        | Bacteriology                                  | 10                 | 106,459   | 2.6                  |
| 5        | Biochemistry                                  | 3                  | 49,108    | 1.2                  |
| 6        | Biology                                       | 2                  | 29,929    | 0.7                  |
| 7        | Biomedical Engineering                        | 3                  | 69,200    | 1.7                  |
| 8        | Biophysics                                    | 1                  | 19,850    | 0.5                  |
| 9        | Chemistry                                     | 4                  | 48,775    | 1.2                  |
| 10       | Clinical Investigation Unit                   | 9                  | 129,689   | 3.1                  |
| 11       | Dentistry                                     | 7                  | 105,033   | 2.5                  |
| 12       | Endocrinology                                 | 1                  | 7,200     | 0.2                  |
| 13       | Genetics                                      | 3                  | 35,958    | 0.9                  |
| 14       | Gynaecology                                   | --                 | --        | --                   |
| 15       | Haematology                                   | 2                  | 16,984    | 0.4                  |
| 16       | Histology, Embryology                         | --                 | --        | --                   |
| 17       | Laboratory (Hospital)                         | 4                  | 32,950    | 0.8                  |
| 18       | Medical Jurisprudence and Ethics              | --                 | --        | --                   |
| 19       | Medical Research Institutes                   | 21                 | 880,121   | 21.3                 |
| 20       | Medicine                                      | 21                 | 250,198   | 6.1                  |
| 21       | Microbiology                                  | 4                  | 34,304    | 0.8                  |
| 22       | Neurology and Neurosurgery                    | 4                  | 53,722    | 1.3                  |
| 23       | Nursing                                       | --                 | --        | --                   |
| 24       | Nutrition                                     | 2                  | 8,975     | 0.2                  |
| 25       | Obstetrics                                    | 9                  | 84,404    | 2.0                  |
| 26       | Ophthalmology                                 | 10                 | 104,914   | 2.5                  |
| 27       | Otolaryngology                                | 1                  | 15,900    | 0.4                  |
| 28       | Paediatrics                                   | 28                 | 279,390   | 6.8                  |
| 29       | Parasitology                                  | 3                  | 33,600    | 0.8                  |
| 30       | Pathological Chemistry                        | --                 | --        | --                   |
| 31       | Pathology                                     | 1                  | 12,300    | 0.3                  |
| 32       | Pharmacology                                  | 5                  | 55,506    | 1.3                  |
| 33       | Pharmacy                                      | 3                  | 18,340    | 0.4                  |
| 34       | Physiology                                    | 2                  | 12,600    | 0.3                  |
| 35       | Physiological Hygiene                         | 1                  | 19,000    | 0.5                  |
| 36       | Physical Medicine, Rehabilitative Medicine    | --                 | --        | --                   |
| 37       | Physics                                       | 1                  | 29,400    | 0.7                  |
| 38       | Psychology                                    | 24                 | 191,830   | 4.7                  |
| 39       | Psychiatry                                    | 26                 | 329,741   | 8.0                  |
| 40       | Public Health, Social and Preventive Medicine | 30                 | 399,401   | 9.7                  |
| 41       | Radiology                                     | 1                  | 1,920     | 0.1                  |
| 42       | Schools of Hygiene, Nursing, etc.             | 4                  | 37,701    | 0.9                  |
| 43       | Social Work                                   | --                 | --        | --                   |
| 44       | Sociology, Anthropology                       | --                 | --        | --                   |
| 45       | Speech Pathology, Audiology                   | 2                  | 10,989    | 0.3                  |
| 46       | Surgery                                       | 18                 | 282,948   | 6.9                  |
| 47       | Zoology                                       | 1                  | 3,600     | 0.1                  |
| 48       | Other Departments                             | 25                 | 297,614   | 7.2                  |
|          | TOTAL                                         | 299                | 4,122,653 | 100.0                |

NOTE: The sums stated in this Table are those initially approved at June 1, 1966.

TABLE 8

DISTRIBUTION OF RESEARCH FUNDS UNDER NATIONAL HEALTH GRANTS  
ACCORDING TO FIELD OF INVESTIGATION -- 1966-67

| Code No. | Field of Investigation                                | Number of Projects | Amount \$ | Amount as % of Total |
|----------|-------------------------------------------------------|--------------------|-----------|----------------------|
| 1        | Allergy                                               | --                 | --        | --                   |
| 2        | Anaesthesiology                                       | 1                  | 4,850     | 0.1                  |
| 3        | Anatomy                                               | 1                  | 2,500     | 0.1                  |
| 4        | Anthropology                                          | 1                  | 35,000    | 0.8                  |
| 5        | Bacteriology                                          | 11                 | 195,677   | 4.7                  |
| 6        | Biochemistry                                          | 18                 | 200,804   | 4.9                  |
| 7        | Biomedical Engineering                                | 6                  | 82,596    | 2.0                  |
| 8        | Biophysics                                            | --                 | --        | --                   |
| 9        | Dentistry                                             | 10                 | 94,209    | 2.3                  |
| 10       | Dermatology                                           | --                 | --        | --                   |
| 11       | Endocrinology                                         | 2                  | 10,506    | 0.3                  |
| 12       | Environmental Medicine, Industrial Health, Toxicology | 11                 | 240,870   | 5.8                  |
| 13       | Epidemiology, Biostatistics                           | 16                 | 168,338   | 4.1                  |
| 14       | Genetics                                              | 2                  | 12,764    | 0.3                  |
| 15       | Gerontology                                           | 3                  | 47,893    | 1.2                  |
| 16       | Gynaecology                                           | --                 | --        | --                   |
| 17       | Haematology                                           | 6                  | 59,472    | 1.4                  |
| 18       | Immunology, Serology                                  | 6                  | 118,160   | 2.9                  |
| 19       | Medicine                                              | 12                 | 163,727   | 4.0                  |
| 20       | Medical Administration and Education                  | 15                 | 294,968   | 7.2                  |
| 21       | Neurology, Neurosurgery                               | 10                 | 136,314   | 3.3                  |
| 22       | Obstetrics                                            | 3                  | 21,881    | 0.5                  |
| 23       | Ophthalmology                                         | 10                 | 128,914   | 3.1                  |
| 24       | Otorhinolaryngology                                   | 6                  | 35,999    | 0.9                  |
| 25       | Paediatrics                                           | 14                 | 142,069   | 3.4                  |
| 26       | Parasitology, Mycology                                | 4                  | 37,200    | 0.9                  |
| 27       | Pathology                                             | 3                  | 35,330    | 0.9                  |
| 28       | Pharmacology, Therapeutics                            | 11                 | 72,250    | 1.7                  |
| 29       | Physical Medicine, Rehabilitation                     | 6                  | 241,144   | 5.8                  |
| 30       | Physiology, Metabolism                                | 7                  | 90,142    | 2.2                  |
| 31       | Preventive Medicine                                   | 1                  | 14,595    | 0.4                  |
| 32       | Psychiatry                                            | 32                 | 347,055   | 8.4                  |
| 33       | Psychology                                            | 23                 | 193,330   | 4.7                  |
| 34       | Radiobiology                                          | 3                  | 48,664    | 1.2                  |
| 35       | Radiology                                             | 1                  | 4,500     | 0.1                  |
| 36       | Sanitary Engineering                                  | 14                 | 118,469   | 2.9                  |
| 37       | Social Medicine, Sociology                            | 7                  | 76,695    | 1.9                  |
| 38       | Surgery                                               | 15                 | 179,153   | 4.3                  |
| 39       | Virology                                              | 7                  | 116,615   | 2.8                  |
| 40       | Unclassifiable                                        | 1                  | 350,000   | 8.5                  |
| TOTAL    |                                                       | 299                | 4,122,653 | 100.0                |

NOTE: The sums stated in this Table are those initially approved at June 1, 1966.

TABLE 9

DISTRIBUTION OF RESEARCH FUNDS UNDER NATIONAL HEALTH GRANTS  
ACCORDING TO DISEASE GROUPS -- 1966-67

| Code No. | Class of Disease                                                         | Number of Projects | Amount \$ | Amount as % of Total |
|----------|--------------------------------------------------------------------------|--------------------|-----------|----------------------|
| 1        | Infective and Parasitic Diseases                                         | 30                 | 478,120   | 11.6                 |
| 2        | Neoplasms                                                                | 4                  | 399,910   | 9.7                  |
| 3        | Allergic, Endocrine System, Metabolic and Nutritional Diseases           | 17                 | 196,785   | 4.8                  |
| 4        | Diseases of the Blood and Blood-forming Organs                           | 6                  | 61,983    | 1.5                  |
| 5        | Mental, Psychoneurotic, and Personality Disorders                        | 60                 | 657,807   | 16.0                 |
| 6        | Diseases of the Nervous System and Sense Organs                          | 28                 | 314,737   | 7.6                  |
| 7        | Diseases of the Circulatory System                                       | 20                 | 271,041   | 6.6                  |
| 8        | Diseases of the Respiratory System                                       | 10                 | 150,283   | 3.6                  |
| 9        | Diseases of the Digestive System                                         | 10                 | 106,229   | 2.6                  |
| 10       | Diseases of the Genito-Urinary System                                    | 1                  | 7,200     | 0.2                  |
| 11       | Deliveries and Complications of Pregnancy, Childbirth and the Puerperium | 4                  | 37,541    | 0.9                  |
| 12       | Diseases of the Skin and Cellular Tissue                                 | --                 | --        | --                   |
| 13       | Diseases of the Bones and Organs of Movement                             | 5                  | 133,069   | 3.2                  |
| 14       | Congenital Malformations                                                 | 6                  | 159,214   | 3.9                  |
| 15       | Certain Diseases of Early Infancy                                        | 5                  | 52,505    | 1.3                  |
| 16       | Symptoms, Senility and Ill-defined Conditions                            | 2                  | 9,970     | 0.2                  |
| 17       | Accidents, Poisonings, and Violence (Nature of Injury)                   | 12                 | 159,575   | 3.9                  |
| 18       | Diverse Disease Entities                                                 | 28                 | 302,363   | 7.3                  |
| 19       | No Disease Entity Involved (Chiefly Administrative)                      | 51                 | 624,321   | 15.1                 |
|          | TOTAL                                                                    | 299                | 4,122,653 | 100.0                |

NOTE: The sums stated in this Table are those initially approved at June 1, 1966.



## EPIDEMIOLOGY

The purpose of the Epidemiology Division is to assist in the control of infectious and other diseases by disease surveillance, epidemiological study, assistance in epidemics, and by supporting the development of epidemiology in Canada.

### National Health Grants

The Division reviews applications for National Health Grants respecting epidemiological research projects, tuberculosis control, venereal disease control, local health services and the Canadian Public Health Association, and undertakes associated field visits.

### Disease Surveillance - Epidemiological Bulletin

The Division maintains surveillance of infectious and non-infectious diseases and disability in Canada and other countries. Current information of particular epidemiological interest to Canada is published monthly in the "Epidemiological Bulletin". This is a restricted publication which provides current information to medical officers of health, public health laboratory workers and other public health practitioners.

### Tuberculosis

New active cases of tuberculosis have declined dramatically in the last decade, since the introduction of effective antituberculosis drugs. The number of new active cases reported declined from 9,122 in 1954 to 4,803 in 1965. Tuberculosis deaths also dropped from 1,593 in 1954 to 697 in 1965. The disease remains a considerable problem in all provinces. The Division, in addition to surveillance and epidemiological studies, provides a consultant service, and assesses applications for National Health Grants support.

### Venereal Disease

Reported syphilis in Canada showed a rising trend from 1958 to 1963, and since then has declined. Reported gonorrhea also showed a rising trend since 1958, with a slight decline in 1965. Venereal disease is known to be under-reported, and declining trends may not reflect the real situation.

The Department assists provincial departments of health in venereal disease control through grants, and by production of educational materials. The Division reprinted the booklet "Confidentially ... to Teenagers", and revised the publications "Venereal Disease - What You Should Know" for public use, and "Syphilis and Gonorrhea" for physicians. In addition, the annual statistical report on venereal disease was prepared for distribution to medical officers of health, and to others on request.

## Immunization Study using Jet Injectors

In November, the Division initiated a study to evaluate the field application, and the effectiveness of three different types of compressed air jet injectors for immunization purposes. Volunteers from the Departmental staff served as the test population, and monovalent influenza vaccine was employed as the test antigen. Jet injectors used in the study consisted of a portable hand model, a foot operated gun and an electrically operated gun. Two different doses of test antigen, given by two different routes of administration, were compared with the standard dose and route used in normal practice. Results were evaluated in terms of changes in blood antibody levels to the test antigen in pre and post immunization blood samples. Analysis of the data is now in progress.

## Accidents

Accidents are the leading cause of death in every 5-year age group between 1 and 39 years. They are the third leading cause of death for all age groups combined, being surpassed only by cardiovascular diseases and cancer. Of the 10,978 accident deaths in 1965 - 5,049, or 46% were due to motor vehicle accidents.

The Department gives grants to the Canadian Highway Safety Council, and to the Traffic Injury Research Foundation of Canada. The chief function of the Safety Council is to promote traffic safety education. The primary purpose of the Research Foundation is to stimulate and coordinate research into the medical aspects of traffic accidents. The Division studies accident statistics to determine the nature and causation of injury, and to pinpoint susceptible groups involved. Through the National Health Grants Program, support is given to research projects leading to improved accident control measures.

## A Canadian Study of Smoking and Health

In 1955, a long-term study was initiated by the Department of National Health and Welfare, with the cooperation of the Department of Veterans Affairs, to investigate the relationships between residence, occupation and smoking habits, and mortality from chronic diseases, particularly lung cancer. This was a joint project of the Epidemiology Division, Health Services Branch, and the Biostatistics Division, Research and Statistics Directorate. The final report entitled "A Canadian Study of Smoking and Health" was published in 1966.

The outstanding finding of this study is that cigarette smokers, compared to non-smokers, had excessive mortality, particularly from heart disease, lung cancer, bronchitis and emphysema. This is consistent with findings of other related studies.

## Study of the Course of Disease in Chronic Bronchitis Cases

A study was initiated in 1964 to elucidate causal factors in chronic chest disease among recipients of veterans' pensions. This project is being carried out jointly by this Department, the Department of Veterans Affairs,



and the University of British Columbia. Statistical analysis was conducted, and a report is in preparation.

#### Studies of Local Health Services

In 1963 the Division assisted the Canadian Public Health Association in a cooperative study of functions and activities of all public health personnel in two large health units. Data processing was postponed to permit extension of the study to include nurses in four additional health units. This has been completed, and a report prepared. Analysis of data in the original two health units is now under way.

#### National Advisory Committee on Immunizing Agents

The National Advisory Committee on Immunizing Agents was established in 1964 to advise and make recommendations on immunizing agents to the Dominion Council of Health. The Committee held two meetings during the year at which it considered the use of immunizing agents in public health programs, the development of new and improved vaccines, and indicated aspects of special interest for further study.

#### Advisory Committee on Epidemiology

The Advisory Committee on Epidemiology was established in 1962. Membership includes epidemiologists from provincial departments of health and Canadian universities, and other consultants. The purpose of the Committee is to advise on matters relating to the study and control of communicable and non-communicable diseases including chronic illness, and to assist in development of the most effective epidemiological services for the benefit of the country as a whole. The Committee met once during the year, and has reported to the Dominion Council of Health.



## HEALTH EDUCATION

The Health Education Unit was established in 1963 to assist the Director General of Health Services and the Committee on Health Education in the coordination of educational activities and resources within the Branch, and to facilitate their implementation in the provinces.

Being primarily an advisory unit, the services of the Consultant in Health Education were provided on request to: (a) the divisions and programs of the Health Services Branch; (b) provincial health authorities; (c) other departmental branches and divisions; (d) other Departments; and (e) voluntary health agencies and professional associations.

Over fifty per cent of the Consultant's time was spent in advising the divisions and programs of the Health Services Branch on the assessment of needs for health education materials in the provinces; planning, pre-testing and evaluation of films, filmstrips, publications and posters; planning of radio scripts and exhibits; selection of appropriate educational methods and techniques; provision of bibliographical references; the availability of educational materials; and other tasks related to the co-ordination of health education activities.

Increased provincial demands for consultation services on new health education programs and materials, selection of new personnel and other related matters resulted in visits to eight provincial divisions of health education. In addition, a regular exchange was achieved of health education materials produced by the Department as well as the provincial departments of health. Frequent contact through correspondence was maintained with the provincial divisions of health education.

To provide an effective exchange of ideas on the procedures to be employed in the provision of health education materials to the provinces, to affect the establishment of professional courses in health education at the two Schools of Hygiene in Canada, and to discuss the potential of television in public health education, an Ad Hoc Meeting on Health Education was convened by the Health Education Unit in December. This meeting was attended by most of the provincial directors of health education and representatives from various Departmental branches and divisions, resulting in specific recommendations to be acted upon in the future.

The Consultant in Health Education served as a member of several departmental committees, among which were the Committee on Health Education, the Medical and Biological Film Library Committee, and the Advisory Committee on Smoking and Health.

Frequent consultation was provided to other branches and divisions of the Department, including the Food and Drug Branch, Medical Services, Fitness and Amateur Sport, International Health, National Health Grants, Health Resources, and Information Services.

Under the auspices of International Health, the Unit was instrumental in arranging a six-month observation program in health education for a student from Guyana, under the Commonwealth Caribbean Assistance Program.

The Consultant in Health Education was appointed a Member of the WHO Expert Advisory Panel on Health Education for a period of five years.

During the past year, the Consultant in Health Education assisted the Schools of Hygiene in Montreal and Toronto with the formulation of curricula for teaching of health education. He also served as a special lecturer at the School of Hygiene in Toronto and the School of Hospital Administration at the University of Ottawa, where he lectured on the "Organization of Health Education Services in Canada".

Active liaison was maintained with the major voluntary health agencies and professional associations in order to facilitate the exchange of ideas on new programs and materials and to provide information on health education techniques and methods. Among these were the Canadian Cancer Society, the Canadian Arthritis and Rheumatism Society, the Canadian Tuberculosis Association, Canadian Red Cross Youth, Canadian Mental Health Association, Canadian Heart Foundation, Canadian Medical Association, Canadian Association for Health, Physical Education and Recreation, Canadian Public Health Association, Canadian Health Education Specialists Society, Canadian Education Association, Canadian Teachers Federation, and the Ontario Education Association.

The Health Education Unit has continued to publish the Health Education bulletin five times a year, reaching over 1,800 key people in the public health field.

A technical resource file system maintained by the Health Education Unit, containing bibliographies to programs, studies and materials in health education was used considerably by the various health agencies during the past year.



## SMOKING AND HEALTH

Through the nation-wide Smoking and Health Program, the Department continued its effort to impress upon the Canadian public the health hazards of cigarette smoking.

Educational projects during the year included the production of coloured, animated television clips which are being carried as public service announcements on the major television networks and many private stations. Posters drawing attention to the hazards of smoking were placed in post offices, schools, and other buildings across the country. A Resource Guide for the use of Canadian teachers of Grades five to thirteen was produced and distributed through provincial departments of health and education. Much use was made of a brochure entitled "So I'm Living Dangerously!" which was issued under the joint auspices of the Department of National Health and Welfare and the Canadian Medical Association for the use of Canadian doctors in advising their patients. A coloured animated film, "The Drag", dealing with the cigarette smoking habit and directed primarily to senior high school and university age audiences was completed and, by arrangement with Columbia Pictures, has been shown to theatre audiences across the country. This film, produced for the Department by the National Film Board of Canada, was nominated for an Oscar in the documentary short subject category.

Research projects under the Smoking and Health Program during the year included a further survey of Canadian smoking habits, carried out for the Department by the Dominion Bureau of Statistics, a study of methods involved in successful and unsuccessful attempts to stop smoking, and the establishment of a smoking withdrawal study centre in Toronto.

The most recent Survey of Canadian Smoking Habits, by the Dominion Bureau of Statistics, showed that cigarette smoking had levelled off between August, 1964 and September, 1966. Regular smoking among men 15 and over remained unchanged at 54% and among women 15 and over had only increased from 31% to 32%.

The final Report of the Department's Six Year Study of Smoking and Health, carried out among 78,000 male and 14,000 female pensioners of the Department of Veterans Affairs, was released during the year. One of the major world studies of the relationship between smoking habits and mortality, this study, like others, showed conclusively that cigarette smokers have an increased overall death rate, mainly due to an increased amount of heart and lung disease. The risk increased with duration of smoking, amount smoked, and inhalation, and decreased with discontinuation of the habit. The study was carried out by the Epidemiology Division of the Health Services Branch and the Biostatistics Division of the Research and Statistics Directorate of the Department, with the co-operation of the Department of Veterans Affairs and the Canadian Pension Commission.

A report was also prepared by the Research and Statistics Division of the Department on "Trends in Death Rates for Diseases of Interest in Relation to Smoking, Canada, 1950 to 1964". An analysis was made of



the major heart and lung diseases associated with cigarette smoking. Death rates from lung cancer, chronic bronchitis, and emphysema continued to increase during the period. Although there was a tendency for death rates from heart disease to level off, there was no indication that the hazards from smoking are being reduced or alleviated.

Lung cancer is the leading cause of death from cancer in Canada. There were 3,592 deaths from lung cancer and 1,751 deaths from the other major lung diseases - chronic bronchitis and emphysema - associated with smoking, in Canada in 1965. Coronary heart disease (heart attack) was responsible for the deaths of 24,519 men and 11,729 women in 1965.

In addition to their importance as causes of death, diseases attributable to cigarette smoking are major causes of disability and a drain on financial as well as human resources.

## CHILD AND MATERNAL HEALTH

The Child and Maternal Health Division is concerned with the improvement and maintenance of health of mothers and children in Canada; its ultimate goal is healthier family life.

The functions of the Division are to define desirable standards for maternal and child health services and to assist in evaluating existing facilities and services; to help in the planning of comprehensive programs for mothers and children; to conduct an educational program including the preparation of educational materials for lay and professional use; to initiate and to stimulate field research and the study of current programs and problems in maternal and child health.

### 1965 Population Statistics

Consideration of Canada's population statistics provide some indication of the scope of the Division's interest and concern. The 1965 birth rate was 21.4 per 1,000 of population as compared to 26.1 in 1961. Almost 420,000 new Canadians were born in that year and about one-third of our population is under the age of 15.

### Infant Mortality

A sensitive index of the health of infants and the general health status of the community is its infant mortality experience. In 1965 Canada had 9,862 infant deaths with an infant mortality rate of 23.6 per 1,000 live births. The rate has been decreasing steadily over the last few decades, nevertheless, a dozen countries with comparable standards of living have lower infant mortality rates than Canada's. The main causes of infant deaths, in order of importance were immaturity, congenital malformation, pneumonia, respiratory problems of the newborn, and birth injury. Preventive efforts toward reducing this toll include prevention of neonatal and perinatal causes as well as postnatal factors.

### Maternal Deaths

Our Maternal Mortality rate in 1965 was 3.2 per 10,000 live births. Among causes of maternal deaths haemorrhage and infections accounted for almost one half of these deaths. Little specific information is available on the health status of surviving mothers, or continuing disability due to complications of pregnancy.

Although our declining mortality rates for mothers and children are an indication of progress, this should not preclude the need for continuing vigilance to reduce these mortality rates even further. A major step forward in this direction was the initiation of a National Conference on Maternal and Child Health to examine among other areas of concern our mortality figures.



## National Conference on Maternal and Child Health

The major undertaking of the Division was the Department's first National Conference on Maternal and Child Health held in Ottawa, March 19-22, 1967. Recommended by the Maternal and Child Health Advisory Committee and endorsed by the Dominion Council of Health, the Conference was multi-discipline in character and attended on invitation by 175 professional health workers, primarily physicians, nurses and social workers. The attendance consisted of provincial delegations, and representatives of the national professional organizations whose interests relate to maternal and child health. The Conference was community orientated with emphasis on how to meet the health needs of mothers and young children up to about 2½ years of age, to an examination of present programs and services to meet these needs, as well as to explore factors affecting utilization of services, and to determine where changes in emphasis and organization may be necessary to meet needs more effectively. A number of outstanding international and national authorities including experts from Scotland, France and the United States were among the guest speakers. A number of study documents were prepared and distributed to delegates in advance of the Conference. Among these were reports from the provincial health departments reviewing present programs. Proceedings of the Conference are to be published in the Medical Services Journal, Canada; the proceedings in French will be prepared as a separate document. The Conference has been labelled a success in terms of the pertinence of the program, the active participation and response of the delegates and the extent of the coverage given by the news media. It is hoped that the impetus given to the health of mothers and young children in Canada's centennial year will result in advancement in the field in the not too distant future.

## Maternal and Child Health Advisory Committee

At its ninth annual meeting the Maternal and Child Health Advisory Committee discussed the National Conference on Maternal and Child Health, including the preparation of provincial documents on review of provincial services and on special pre-Conference studies. Some of the other topics discussed included preventive mental health in the community, training future teachers in the field of health education, particularly family life education and nursing education.

The Committee also held a short meeting following the closing of the National Conference on Maternal and Child Health to discuss implications of the Conference for its next meeting, as well as other means of follow-up of the Conference.

The Committee has three subcommittees - Research, Standards of Care and Statistics.

## Subcommittee on Research

Generally speaking for some years now the amount of money expended for research in the field of maternal and child health has been about a half-million dollars. Health grants have provided a great deal of stimulus



to both pediatric and obstetric research in Canada. At its annual meeting, the subcommittee considered 60 projects under the maternal and child health allocation and 13 other projects under other allocations.

#### Subcommittee on Standards of Care

Work continued on the writing and review of the guide "Recommended Standards for Maternity and Newborn Care".

#### The Expert Committee on the Occurrence of Congenital Anomalies

This Committee is a major responsibility of the Division and is engaged in the elucidation of a very complex problem; congenital anomalies. At the present time the Division, in cooperation with four provinces, is engaged in a pilot study of a national surveillance system for congenital anomalies based on information obtainable at birth. At its seventh meeting, held in December 1966, the Committee examined the data for the first 9 months of operation of this pilot scheme. It was decided to continue the pilot study further for a second year. The Committee has explored the scope of research activities in the field of human teratology in Canada and will continue this review.

#### Health Grants Program, Service and Research

Child and Maternal Health Grant Funds assist in the support of a number of provincial maternal and child health consultant services, training of professional personnel in the field, and perinatal and maternal mortality studies. The latter studies provide information about the many factors associated with deaths occurring during this critical period; they also serve as effective educational devices for physicians and nurses particularly.

The pattern of utilization of health grant funds varies considerably among provinces depending on the nature and extent of maternal and child health problems, existing resources and services, as well as provincial policy on utilization. Approximately \$600,000 of the Public Health Research Grant is being allocated for research in Maternal and Child Health, emphasis being placed on factors relating to the health of the mother and the newborn. Important areas being studied are prevention of hemolytic disease of the newborn, genetics of childhood disease, the metabolic causes of mental retardation, and detection of hearing disorders in infancy.

#### Liaison with Other Divisions

Liaison continues with Epidemiology, Research Development, Hospital Insurance and Diagnostic Services, Health Facilities Design, Nutrition, Nursing, Laboratory of Hygiene, and with the Food and Drug Directorate. Further, close collaboration is maintained with the Mental Health Division and the Medical Rehabilitation Division as regards their programs for children with physical, mental or emotional handicaps.

Lectures on medical and nursing matters were given at the Civil Defense College, Arnprior, for both Emergency Health and Emergency Welfare Divisions.

## Consultative Services

Consultant services in maternal and child health programs are provided to provincial health departments. This is carried out by collaboration with the Divisions of Maternal and Child Health, Local Health Services, and Public Health Nursing. Professional staff assisted frequently in programs, institutes and conferences sponsored by provincial departments and other professional groups and voluntary agencies. Lectures were given at University of Toronto School of Hygiene and McGill University.

## Health Education Program

Almost the entire budget for educational materials was given to the production of the rewritten "Canadian Mother and Child" including new art work and format. With the change in Treasury Board regulation, allowing for the printing of a larger number of the book than ever before, it is hoped that distribution will be more in keeping with the need expressed by provincial authorities over the past several years. One new pamphlet "Breast Feeding Your Baby" was distributed during the year.



## DENTAL HEALTH

The Division's objective is the improvement and maintenance of the oral health of the Canadian people. To attain this objective the Division furnishes consultative services, information, educational material and other assistance to provincial governments, professional organizations and to Branches and Divisions of the Department, including particularly the Medical Services Branch and Emergency Health Services. The Division also provides leadership in the development and stimulation of projects in dental public health research and education.

### Consultative Services

In addition to the voluminous correspondence with numerous individuals and organizations seeking information and advice, consultative services were supplied to other Branches, Directorates and Divisions within the Department and to other government departments upon request. The Division provides a service to all provincial departments of health and maintains a close liaison with faculties of dentistry of Canadian universities, the Canadian Dental Association, the Canadian Public Health Association and other health orientated bodies.

Throughout the year conferences were held with Food and Drug Branch in reference to the safety and efficacy of dental remedies and prophylactic material.

Within the Department the Division is closely associated with the Health Grants program and a sum of \$1,600,000 was made available to support provincial dental programs and the training of dental public health personnel during 1966-67.

The Division also acts as a consultant to the Health Resources Fund administration on new or additional facilities for dental purposes.

### Research

The Division's program of stimulating, initiating and conducting projects to secure the data required for definitive planning purposes has continued throughout the current year.

The intra-mural project to provide data upon utilization of current facilities as a measure of demand for services has been successful in securing sufficient quantities of patients' records from practising dentists in the single community chosen as a test area to justify the method as a practical one.

The current project is now being completed as to coding of the technical dental data by the Division, and will shortly be passed to the Research and Statistics Division for processing and analysis as originally planned.

It is proposed to select at least one more community for addition to the study in the fiscal year 1967-68.

The Division, with the co-operation of the provincial Dental Directors, is compiling a list of Canadian programs that include some dental treatment to definable groups of the population. Details of the programs are being secured directly from the individuals responsible for them. The voluntary response for co-operation in assembling this data is good.

An extra-mural project, supported by the Public Health Research Grant, to secure data upon need has tested a simplified technique for this purpose and found it to be an economical and practical method. Further tests are being conducted with the co-operation of the Royal Canadian Dental Corps and the preliminary reports are favourable.

Teaching and demonstration presentations of the simplified method were conducted for dental personnel attending the C.P.H.A. Annual Meeting in Ottawa. The method was well received by those who are typical of the ultimate users of the method. This project was conducted on a bilingual basis and a large representation from the Province of Quebec Dental Services participated.

The method which is being developed in association with the World Health Organization, primarily by the Chairman of the Subcommittee on Statistics and Evaluation of the Advisory Committee on Dental Health, will be further tested on an international basis. If the tests are favourable, the method will be considered by the Division as the basis for a Canadian Dental Health Index.

Currently fourteen extra-mural dental projects, of which eight are new projects totalling \$157,000, have been approved for Public Health Research Grant support. A requirement exists for continuing guidance to researchers to develop projects of direct pertinence to the improvement of the dental health of the population. Thirteen of the projects were recommended by the Subcommittee on Dental Research, and one by the Subcommittee on Health Services.

#### Health Education

The Division's dental health education program aims to promote an increase in the utilization by the community, the family and the individual, of measures known to be safe, practical and effective in the prevention of dental disease.

The program is a major source, in Canada, of dental health education materials for teachers and health workers. This year, in spite of the production of over three-quarters of a million prints of revised educational material, the effective demand for this material still grossly exceeded what could be supplied.



The Division's educational material is being made available for display at the International Dental Congress, to be held in Paris. In Canada, as in many other countries, education of the public concerning fluoridation, its relative safety and the tremendous health and economic advantages to be derived therefrom is still, in some areas, one of the main problems to be faced by health authorities at all levels of government. Information and reports on fluoridation were therefore supplied at Expo 67 so that, in association with the consideration of man's requirements of good water to enjoy good health, the significance of this public health measure may be emphasized.

### Emergency Health Services

The Division participated in the organization and activities of the Symposium on Undergraduate Indoctrination in Mass Casualty Care held in Ottawa, and acted in this respect as liaison to dental faculties. A bilingual instructor was provided on several occasions as Course Director and/or Lecturer for Emergency Health Services course commitments to conduct courses in the French language at the Emergency Measures College. Lectures were also given at dental faculties and societies. Assistance was also provided to Emergency Health Services in the form of prepared technical papers for publication in both languages in the Journal of the Canadian Dental Association, l'Union Médicale, and Canadian Medical Association Journal.

### Medical Services

Consultant services are provided by the Division to Medical Services, mainly as regards three activities - Indian Health Services, Northern Health Services, and Sick Mariners Service. At headquarters, an officer of the Division has, among his administrative duties, technical supervision over the dental program and responsibility for making decisions concerning the approval of the applications for special dental treatments. This dental program has, for general objective, the improvement and preservation of the dental health of those groups whose health care, by legislation or custom, has been assigned to the Medical Services Branch of the Department of National Health and Welfare. Arrangements for the purchase of services from private dental practitioners, by Medical Services Branch, on a fee-for-service basis, are becoming more and more popular. With improvement of working equipment and conditions and the recently revised Schedule of Dental Fees, the program continues to increase in efficiency, productivity, and popularity.

### Advisory Committee on Dental Health

The Advisory Committee on Dental Health continues to be a source of assistance to the Division and the Department.

The three Subcommittees, namely, Statistics and Evaluation, Dental Health Resources Development, and Dental Research, were quite active during the year.

The Subcommittee on Statistics and Evaluation is concerned with gathering data re the dental health of Canadians and a methodology for a streamlined Dental Health Index is in its final stages. A program in co-operation with the Dominion Bureau of Statistics has been planned and will go into operation during 1967-68.

A recommendation of the Dental Health Resources Development Subcommittee for the establishment of a special or ad hoc committee, chaired by an outstanding layman, to study dental auxiliaries, could prove to be of great importance to the dental health of our people and the dental profession.

The Subcommittee on Dental Research is assisted by the Advisory Committee in matters pertaining to the type of research which is of greatest pertinence at the present time.



## MENTAL HEALTH

The purpose of the Mental Health Division is to advise and assist this Department and the provincial Departments of Health in preventing mental illness and improving the mental health of Canadians. It is concerned with the development and maintenance of high standards of patient care, treatment and rehabilitation, as well as with the stimulation and support of research.

On request, it offers consultation to universities, training centres, mental hospitals, clinics, and also to such mental health professions as psychiatry, psychology, nursing and social work. It issues technical and scientific reports on specific mental health problems and conducts an extensive public information program for the general public and for the variety of professionals involved in the direct or indirect provision of mental health services.

### Health Grants

Under the national Health Grants Program and in collaboration with independent scientific referees, the Division reviewed and processed over 90 research grant applications submitted by the provinces. It also reviewed numerous applications for training bursaries and short courses, as well as several hundred grants for special services and facilities in mental hospitals, clinics and other similar units.

### Consultation and Liaison

The Division's Consultants (psychiatry, nursing, social work, psychology and research) met with provincial health authorities, professional associations, university departments and voluntary health agencies. A special study was made of mental health services and research programs administered by the Ministry of Health and the Medical Research Council in the United Kingdom. The psychiatric nursing consultant participated on a survey team which studied the program, personnel staffing patterns and functions of the nursing division of one of the provincial mental hospitals. Also, a three-day, Federal-Provincial conference of psychiatric Nurses was convened in Ottawa in June to provide an opportunity for the directors of nursing in the provincial mental health services, in collaboration with other psychiatric nursing leaders, to explore and identify current educational and professional problems, and formulate appropriate recommendations for action. Highlights of the proceedings of this conference will be published, in both English and French, early in fiscal year 1967-68.

### Education and Information

CANADA'S MENTAL HEALTH, the Division's 60-page journal, published in both English and French editions and directed primarily to professional workers - psychiatrists, psychologists, social workers, nurses - continued its circulation increase, both nationally and internationally. Featuring articles, technical reports, book reviews and coverage of national and international mental health developments of professional interest, the

periodical also publishes 15-20 page monographs as special Supplements to some of its issues. These Supplements are widely used for university training and for seminars, workshops and other types of in-service training in hospitals, clinics and other mental health facilities. Published this year were:

"Mental Health Dollars - For Whom? For What? And Why?"  
by Paul Christie, M.D.

"Social and Cultural Factors in Deviant Classroom Behavior"  
by Thos. Linton, Ph.D.

"Psychotherapy - Learning and Relearning"  
by Irving Greenberg, Ph.D.

"Group Treatment of the Mentally Ill"  
by Gisela Konopka, D.S.W.

"Mental Health Coming Events" - A Calendar of National and International Professional Conferences and Meetings.

The Division maintains a supply of over 50 CMH Supplement - monographs and during the year responded to some 1,500 requests for copies of these for teaching and other professional educational purposes. Finally, in response to the growing concern about emotional problems of children, a complete issue of CMH was devoted to "Children and Mental Health".

To assist in preventive work, the Division maintains for the general public a stock of over 50 pamphlets, booklets and posters which are distributed by and available from local and provincial Health Departments. These include a broad range of topics, and the annual distribution totalled over 1 million pieces.

The Division continued to respond to requests for information and advice from a wide variety of sources - universities, schools, hospitals, welfare agencies, clinics, students, citizen groups and others.



## NUTRITION

The basic objectives of the Nutrition Division are to promote food consumption practices commensurate with health, fitness and well-being and to ascertain the ability of all Canadians to obtain the required foods to maintain an adequate nutritional status. The Division functions primarily on a consultant basis; as advisory to other units within the Department of National Health and Welfare, to other federal departments and agencies, to provincial governments, and to national professional and commercial organizations.

The staff of the Division consists of a Chief with medical specialization in nutrition, 3 nutrition consultants with specialized training and experience in public health nutrition and nutrition research, and supporting office staff. A fourth consultant position, which has functioned primarily in standards of operation of hospital food services, was transferred to Health Insurance and Resources Branch in October 1966.

The program of the Division includes activities in the general areas of research, nutrition education and the practical application of knowledge in the science of nutrition.

### Research

Several university departments and research institutions were visited for discussions of nutrition research under way or proposed which would have application in public health practice. Advice and assistance was provided on planning, design or conduct of research projects under National Health Grants; among these were: investigation of nutrient values of Canadian foods, methodology for assessment of nutritional status, the application of computer processing for analysis of food survey data, the nutritional requirements of the elderly and approaches to research in evaluation of the effectiveness of measures for conveying to the public a practical knowledge of nutrition.

Work was continued on the assessment of dietary, clinical and biochemical data obtained from the Medical Services Branch study of the nutritional status of Eskimos. Two-day food records of 1500 Nova Scotia school children were scored according to Canada's Food Guide.

Food consumption data for Canada, provided by the Dominion Bureau of Statistics and the Department of Agriculture, were calculated in terms of the average nutrients available per person; showing a continuing generous national food supply to meet the needs of the population.

Studies were continued and extended on methodology for assessing staffing needs for hospital dietary departments and on comparative costs in hospital operation in the use of pre-prepared infant formulae versus conventional formulae room preparation. Studies were initiated on the practical application of computer processing in the operation of hospital food service departments.





This realistic photograph of fruit still life depicts food which Nutrition Division consultants consider should be part of daily diet.



The National Repository of Nutrition Research, providing a central reference service on nutrition research reported or in progress, continued to draw the interest and support of research scientists.

## Education

Consultant service was provided to provincial departments of health, to other federal agencies and to national commercial organizations with regard to methods of presentation of nutrition information and the technical accuracy of the material to be presented.

Nutrition education materials are planned and evaluated in co-operation with the provincial departments of health in order to provide those materials which are most needed in support of their programs. The Canada's Food Guide leaflet and the companion folder, Good Eating With Canada's Food Guide, together with the booklet, Healthful Eating, continue to have the strongest demand for use in nutrition education programs. Editing of the French language version of the basic publication, Dietary Standard For Canada, was completed for release early in the next fiscal year. A revision was published of the popular booklet, The Noon Meal and revision of the booklet, How To Plan Meals For Your Family, was commenced.

Significant new materials produced this year were: A 20-minute film presenting the nutritional requirements in feeding a family; an exhibit, Nutrition - Key Factor For Health, presenting Canada's Food Guide as a basis for nutrition and relating federal, provincial and local nutrition services to the needs of the individual citizen and a new poster directed to teenagers. The design and art work for a new poster, Breakfast As You Like It, as an educational aid in promoting a good breakfast, was completed for publication in the following year.

In co-operation with Information Services, material was provided for the production of four radio scripts. Advice was provided on radio spot announcements and press fillers.

Providing current information on nutrition for professional persons who work in this area, ten issues were published of the twelve-page periodical, Canadian Nutrition Notes (circulation 5,900 English, 2,200 French), and two issues of the mimeographed Reference Reading List.

The Chief of the Division and consultant staff presented lectures and participated in training courses at universities, technical institutes or training schools, and at meetings of various professional bodies.

Consultation was provided to authors and publishers on technical accuracy and method of presentation in text books and publications for public information.

## Other Consultation Services

Advice was provided to various government agencies on the needs and possible organizational approaches for special nutrition services, such as

those directed to local public health needs, welfare services and welfare rations for food support programs, special rations for unusual situations, and community services for the aged or handicapped. Consultation was provided on feasibility or possible approaches for two proposed dietary survey projects.

Technical advice and assistance was provided on international projects of FAO, WHO, UNICEF and Freedom From Hunger, and active liaison was maintained with other international bodies concerned with nutrition. Advice was provided for International Health and External Aid on training requirements and available training courses for personnel from developing countries.

### Advisory Committees

The Canadian Council on Nutrition has served, since its formation in 1938, as an advisory body to the Minister on matters pertaining to nutrition as it affects the health of Canadians. This Council met on 31 January, 1967. Topics discussed included: General staffing needs for professionally trained nutritionists in Canada, the shortage of such trained personnel, and their professional training requirements; Food and Drug Regulations relating to claims regarding fatty acid content of foods and claims regarding multi-vitamin and mineral supplements; fortification of fluid milk with Vitamin D as a measure to prevent an increasing occurrence of infantile rickets; adoption of a uniform food identification coding system for use in computer data processing programs; and the need for developing therapeutic diet counselling services within community health services.

The Dominion-Provincial Nutrition Committee, a committee of the Canadian Council on Nutrition consisting of a nutritionist from each province together with the professional staff of the Nutrition Division, met on 12-13 September 1966. The annual meeting of this Committee provides an opportunity to review and co-ordinate provincial programs and permits discussion of the means by which the federal program may best assist provincial programs.



## LABORATORY OF HYGIENE

The Laboratory of Hygiene consisting of five separate scientific laboratories and an administration section serves Canada as its Federal or National public health laboratory. The prime objective of this group of laboratories may be very broadly defined as the improvement of health laboratory services in Canada, through the provision of special technical assistance and consultative services to Provincial departments of health, hospitals, research institutions and other government and non-government agencies. Coordination of Provincial and Federal public health laboratory services is maintained through a Federal-Provincial advisory committee to the Minister, the Technical Advisory Committee on Public Health Laboratory Services, which consists of the 10 Directors of the provincial laboratories, the Director of laboratories of the Department of Veterans Affairs, a representative of the Department of National Defence and a couple of other special representatives under the chairmanship of the Director of the Laboratory of Hygiene. The Laboratory of Hygiene also provides a special technical and consultative service to the Food and Drug Directorate in the control of the "biological" drugs.

### Bacteriological Laboratories

These laboratories provide reference services to provincial laboratories and to other government agencies, offer consultative and advisory services to these groups, collaborate with international reference centers, carry out applied research and engages in teaching of Provincial and other approved laboratory personnel.

The National Enteric Reference Center received 2,336 routine cultures for examination during the year, compared with 2,375 the previous year. Of these, 1,221 were identified as *Salmonellae*, 295 as *Shigellae* and 426 as Enteropathogenic *E. coli*. The rest were identified as non-pathogens. In addition, 88 cultures of gram-negative organisms from the Easter Island expedition were examined and grouped. The Center continued to collaborate with Dr. A. Gray of Women's College Hospital, Toronto, in the serotyping of *E. coli* strains isolated from urinary tract infections.

Eleven *Salmonella* serotypes not previously reported in Canada were identified. *S. alachua*, *S. duisburg*, *S. emek*, *S. kottbus* and *S. mission* were isolated from human cases of infection. *S. arkansas* was isolated from poultry feed, *S. manila* from bone meal, *S. nottingham* from garter snakes, *S. phoenix* from a spiny lizard and *S. westhampton* from animal feeds. A new *Salmonella* serotype isolated in the routine screening of military personnel from Tanzania recently arrived in Canada for special training was described and the designation *S. rideau* was assigned to it.

*S. typhimurium* was again the serotype most frequently responsible for salmonellosis in man and was also the most frequently isolated serotype from animals and poultry. Other serotypes often associated with human infection were *S. newport*, *S. heidelberg*, *S. saint-paul*.





The Laboratory of Hygiene.



A young technician inoculates eggs with a virus at the Virus Laboratory in Tunney's Pasture.



In human shigellosis, Sh. sonnei accounted for over 50% of *Shigella* infections and was followed by Sh. flexneri 2 and Sh. flexneri 3 and 6. Among the enteropathogenic E. coli, 026:B6 and 0127:B8 were the predominant serotypes. As a further service to the provinces and in the interest of maintaining quality of performance, the Center supplied 362 liters of standardized *Salmonella* suspensions for Widal agglutination tests and 3,378 ml. of diagnostic antisera.

The national Staphylococcus Phage Typing Center received 5,013 cultures for typing during the year, compared with 4,993 in 1965-66, and distributed 420 lyophilized phages and 412 propagating strains. Collaboration with the International Staphylococcus Reference Laboratory (Colindale, London) continued and a report on the usefulness of 5 experimental phages was presented at the International Subcommittee meeting in Moscow in July 1966. The Center took part in a comparative typing survey conducted by the Communicable Disease Center, Atlanta, Ga., and it is gratifying that our results compared favourably with those of other participants. An evaluation of commercially prepared phage typing material was started and will shortly be completed. The sudden death of the head of this Center during the year severely limited the research undertaken, but fortunately did not curtail our routine services to the provinces.

**Other Bacterial Groups.** A total of 1,608 cultures of streptococci were received for grouping and typing, compared to 779 in the previous year (106% increase), but only 23 cultures of C. diphtheriae were received as against 66 in 1965-66. During the year, 852 ml. of streptococcus grouping sera were prepared and distributed and stock cultures of streptococci and C. diphtheriae were sent on request to provincial laboratories and to hospitals and universities in both Canada and the United States.

**Bacteriological Chemistry.** The Bacteriological Chemistry unit has studied fluorescent antibody techniques to establish standards required for evaluation of commercial fluorescent antisera. Work completed during the year has given new information on the structure of lipopolysaccharides which are major constituents of surface antigens of E. coli, and a method has been devised by which K-antigen of the B type may be isolated.

The Bacteriological Laboratories are actively cooperating with the Health Facilities Design Division in a study of the control of air-borne bacteria in operating rooms at the new Riverside Hospital, Ottawa, and in a refresher training course on the "Environmental Planning of Hospitals".

#### Biologics Control Laboratories

The Biologics Control Laboratories carry out functions which are based on the Laboratory of Hygiene's responsibility for controlling biological drugs viz., bacterial vaccines, toxoids, sera, antibiotics etc., under the Canadian Food and Drugs Act and its role as a National Public Health Laboratory. The two functions are interrelated and complementary. The drug control work consists largely of biological and chemical assays of a large number of biological drugs, both manufacturers' samples and market samples and the inspection of establishments licensed to manufacture



these products. In the field of public health, the emphasis is on the development of better vaccines and their clinical assessment in the field.

Control: "Biologicals". Tests for identity, safety, pyrogens, potency and sterility are carried out routinely on licensed "biological" preparations. A program for collecting samples to ensure that each of the items listed on all manufacturers' licenses are sampled and tested at least 3 times during the year has been the practice for several years. This is in addition to those drugs which are on a "release basis" and each lot of which is subjected to examination and test in the Laboratory of Hygiene before being distributed on the Canadian market. A large number of non-licensed drugs are also tested, particularly for pyrogenicity.

A total of 781 lots of different drugs were tested during the year - an increase of 5.8% over the preceding year. Included in these lots were special surveys carried out on contact lens solutions (89) and on A.C.D. solutions for whole blood collection (86). Fifty three (53) specimens failed to meet the requirements, including two lots of contact lens solution, 47 lots of A.C.D. solution, and 4 lots of an oral bacterial vaccine, all of which were withdrawn from the market.

Antibiotics. A total of 2,234 specimens (requiring 6,409 biological assays and 1,130 other tests) were received and tested. Of these, 715 were antibiotic sensitivity test discs, 35 (5.5%) of which were found unsatisfactory. The remaining specimens were either injectable or non-injectable antibiotic preparations for human use, of which 35 lots were found unsatisfactory and were withdrawn from the market. The tetracycline products of two manufacturers were found to contain degradation products of tetracycline. Two lots contained epi-anhydrotetracycline and another dedimethylanhydrotetracycline. These lots were withdrawn from the market.

During the year, 60 new drug submissions pertaining to new antibiotics or new combinations of drugs containing antibiotics were reviewed. Three collaborative assays with the World Health Organization and the United Kingdom Medical Research Council to establish international standards for Colistin Sulphate, Colistin Methanesulfonate and Rolitetetracycline were carried out. In addition, microbiological assays were developed for Hetacillin, Doxycycline, Methacillin and Dicloxacillin.

Research. Research has been directed first towards the development of new tests which will aid in the control of these biological drugs and, second towards the development of new and improved vaccines. The latter has continued to be very active. The Laboratory's staphylococcus vaccine has been used fairly widely in the veterinary field in the U.S.A., and appears to have been well received. The study of our meningococcus vaccine in collaboration with W.H.O. and the Republic of Haute Volta is now in its third year. A fairly large field trial is in progress at this time. Studies are also continuing towards the development and improvement of vaccines for typhoid, gonorrhea, tuberculosis and whooping cough. The protective antigen in pertussis vaccine has been successfully isolated from the toxic fractions and attempts are now being made to produce a



protective toxic-free vaccine. While this work is encouraging, its success will depend on results obtained in field trials which have still to be arranged. Our studies with gonococcus vaccine have been continued. One small lot of experimental vaccine was prepared for field testing and a small clinical trial was carried out in Vancouver. This is now being followed up by a slightly larger trial in the same city.

An attempt is being made to develop better laboratory diagnostic tests for gonorrhea and meningitis.

These Laboratories are represented on W.H.O. panels for the control of biological preparations and antibiotics. This collaboration includes participation and attendance at "expert" meetings in Geneva, in reviewing and commenting on proposed requirements of biological drugs and in special vaccine studies mentioned above.

### Clinical Laboratories

The activities of the Clinical Laboratories are concentrated on syphilis serology, blood group serology and clinical chemistry.

**Syphilis Serology.** As the National Reference Center in syphilis serology, the main objective of this Center is the maintenance of a high standard of performance in the laboratories in the country carrying out this type of work. To accomplish this, standardized reagents (VDRL antigens, Kahn antigens, Kolmer antigens, Amboceptor and Complement) have been distributed from this Laboratory to provincial public health laboratories. During the year, more than 82 liters of these carefully standardized diagnostic reagents were distributed, as compared with 68 liters in the previous year. A refresher course of 10 days duration, designed for senior serologists in provincial laboratories, was held in March at this Laboratory and attended by 8 persons from six provinces. The Treponema Pallidum Immobilization (TPI) test was carried out on 1,187 specimens from individuals presenting a problem in the diagnosis or exclusion of syphilis. Two Canadian laboratories (the Laboratory of Hygiene and the Ontario Public Health Laboratory) perform this highly specific test for syphilis as a service to the rest of Canada.

Special studies have included a comparison of the newly developed Fluorescent Treponema Antibody-Absorption (FTA-ABS) test with other serological tests for syphilis, and investigations of techniques designed to improve the survival time in vitro of the causative agent of syphilis, T. pallidum. This Laboratory has again taken part in the evaluation surveys conducted by the U.S. Public Health Service in which all state laboratories and the national laboratories of 18 other countries participated. The performance of the Canadian laboratory was very satisfactory.

**Blood Group Serology.** A first draft of Canadian specifications or minimal requirements for blood transfusion reagents sold in this country has been drawn up. This draft has been critically examined by a committee appointed by the Canadian Government Specifications Board and consisting of Canadian experts in the field, as well as of representatives of commercial



manufacturers of these reagents. A second draft is now being prepared. Studies on the preparation of a satisfactory standard Coombs' serum reagent were continued.

Clinical Chemistry. The main objectives of this unit are:

- (1) To assist hospital laboratories in improving quality of performance by offering a manual of reliable procedures in clinical chemistry and by offering consultant services in general.
- (2) To evaluate some of the many reagents, sets, kits and devices offered on the market for use in clinical laboratories and to assess the efficiency of new laboratory instruments.
- (3) To provide laboratory services in the field of Nutrition, and
- (4) To carry out research in the early detection of disease.

Studies of new and improved methods for the analysis of body fluids (blood, urine) have been continued and certain of these have been added to the Laboratory of Hygiene's Manual of Clinical Chemistry. A total of 2,511 copies (English) of this Manual have been distributed to 616 hospital laboratories, and 353 copies (French) are in use in 130 laboratories.

Standard cyanmethemoglobin solutions for use in the estimation of hemoglobin are prepared and distributed once a year, upon request, to hospital and public health laboratories. During the year these standard solutions were mailed to 790 laboratories.

The evaluation of diagnostic sets, kits and devices for clinical biochemistry has been continued. A field study of the "New, Improved Urograph", a paper strip impregnated with reagents for the determination of blood urea nitrogen, is in progress in 6 hospital laboratories. Further work was carried out on the reagent strip Dextrostix, designed for the estimation of blood glucose. A report of our studies with the following kits for the determination of total cholesterol was presented to the annual meeting of the American Association of Clinical Chemists: Stanbio, ECR, Chole-Tech, Harleco-Set, Hycel-Cholesterol-Reagent, Hyland-Cholesterol Test, Medi-Chem-Cholesterol Determination Set and Hopper's Poly-re-sol Reagents. The precision of these kits, their accuracy compared to the Abell reference procedure, and the effect of the presence of bilirubin on their performance have been assessed. Cholesterol kits prepared by other manufacturers are being checked in a similar manner. Also presented at this meeting of the American Association of Clinical Chemists was a resumé of our study of various lots of commercial control serum preparations to determine the long-term stability of the various constituents.

In our research laboratories in the Ottawa Civic Hospital, the following projects were conducted:

- (a) The investigation of amino acid patterns in the serum and urine in various pathologic states. One hundred and thirty one (131) specimens from cases with suspected amino acid abnormalities have been examined



using high-voltage electrophoresis, paper chromatography and automated amino acid analyses. A paper has been prepared discussing the relative merits of these techniques in aminoaciduria screening programs.

(b) In collaboration with Dr. C. A. Mitchell, Head of research at the Ottawa Civic Hospital, the isolation and purification of neutralizing antibody from goat milk serum following an injection of the goat udder by various myxoviruses i.e., influenza, adeno virus and mumps, in order to develop an available source of a good supply of these virus diagnostic reagents. Protein fractions have been prepared which show a high content of antibody specific for the virus studied. Two papers presenting our findings have been accepted for publication in the Canadian Journal of Microbiology.

(c) The development of specific staining methods for amino acids and related compounds separated on paper or cellulose acetate strips. A method was developed for the detection of beta-alanine.

(d) A comparative study of blood urea nitrogen methods, a paper on which has been accepted for publication.

The Clinical Nutrition Laboratory continued to plan and provide laboratory services in conjunction with divisions of the Department and outside agencies, particularly in nutrition and health surveys. Special nutritional studies were carried out in collaboration with Northern Health Services on Eskimos (1,104 analyses), and on miners in St. Lawrence, Newfoundland and Yellowknife, N.W.T. (11,712 analyses). In addition, 1,108 special nutritional analyses were carried out for private physicians, hospitals, universities and public health laboratories.

#### Virus Laboratories

An extension of some 10,000 square feet of usable laboratory space was completed during the year and has considerably eased the over-crowding that has existed and has made it possible to undertake some of the more pressing problems which were impracticable in our smaller restricted quarters.

These laboratories, which are responsible for the technical control of viral vaccines and immune sera, have continued to test numerous vaccines for safety and potency before their release for general use in Canada. Fifty one (51) vaccine lots, including 11 Salk and 9 Sabin polio vaccines, 9 measles, 8 influenza and 3 smallpox vaccines, were tested for safety and potency and all were found satisfactory and released for sale. One American Yellow Fever vaccine was tested and found safe.

A new reference smallpox vaccine was prepared by a Canadian manufacturer and tested for potency, together with the International Reference Smallpox Vaccine. This vaccine will serve as a Canadian reference vaccine. Experiments on the stability of freeze-dried smallpox vaccines were continued and no loss in potency was found after storing for 24 months at 4°C.

A W.H.O. collaborative study on the International standardization of rubella (German measles) antisera and on the determination of rubella antibody levels in female population groups was completed. The results of these studies were summarized and submitted to W.H.O. for publication. It is interesting to note that of a group of women in the Ottawa area, who were studied, that approximately 7-14% of these women, in the child bearing age, showed no immunity to rubella virus.

Studies to develop adequate vaccine control procedures for rubella vaccines were continued. A reference lot of rubella virus vaccine was produced and attempts are being made to establish the various marker tests for the characterization of this virus. Five (5) new tissue culture cell lines are being introduced for this purpose. Experiments are also in progress to develop a rubella virus hemagglutination-inhibition test for the detection of rubella antibodies in human and animal sera.

Another W.H.O. collaborative study on the international standardization of influenza virus vaccines was completed and the results submitted to W.H.O.

Studies on genetic markers of polio virus strains, isolated from individuals with various clinical symptoms, were continued. Results of a study on the antigenic characteristics of Sabin Types 1 and 3 vaccine virus during 1-7 passages in the human intestinal tract were published. A simple and rapid microtissue culture assay was developed for the titration of measles and polio viruses and their respective antisera.

This Laboratory, as the National Virus Diagnostic Reference Center, has continued and expanded its services and further collaborated with the World Health Organization in the standardization and distribution of international diagnostic reagents. Standardized antigens for over 33,000 tests and standardized antisera for over 10,000 control tests were distributed during the year.

Over the years there has been little change in the request for rickettsial and equine encephalitis virus antigens by the provincial health departments. This year, however, after the preparation of a stable non-infective western equine encephalomyelitis antigen for use in the complement fixation test, the demand for this antigen increased three-fold. Influenza viral antigens for the performance of over 3,000 hemagglutination-inhibition tests were prepared and distributed, together with the corresponding control antisera. Production of these reagents was undertaken to enable the provincial laboratories to carry out their own diagnostic tests with non-infective but antigenic material. The antigens were rendered non-infective by gamma radiation and were lyophilised using arginine as a stabilizing agent. These viral antigens and antisera are being prepared for 11 different influenza strains and for mumps.

The Virus Laboratories continued the distribution of W.H.O. reference antisera. The range of this reference material is being extended and it is hoped that it will be possible gradually to provide each provincial laboratory with an extensive set of these reference antisera with which they can check their own working reagents. During the past year these



laboratories started the stocking of a number of reference virus strains obtained from recognized reference sources which will be distributed to the provincial laboratories after a minimum number of passages.

With the improvement of provincial diagnostic virus facilities fewer requests for diagnostic aid are made to this laboratory. Although, however, the number of specimens now submitted are fewer, their examination involves considerably more work on the part of this Laboratory for only the viruses which are difficult to identify are now referred here. The analysis of these specimens often requires highly complicated and selective methods which necessitate the use of many unusual media and tissue cultures not available or too costly to maintain in the provincial laboratories.

A total of 653 specimens of human origin were received, of which 350 were for virus isolation and identification and 303 for serological studies. Adeno viruses were most frequently isolated and Types 1 and 3 predominated - Type 3 particularly in respiratory infections of children. Influenza A<sub>2</sub> virus was found to be responsible for outbreaks of influenza in British Columbia, Alberta, Saskatchewan, Manitoba and Ontario, while influenza B virus caused outbreaks in Nova Scotia and Quebec and there is some evidence that it also caused some disease in Ontario. The A<sub>2</sub> strains which were particularly difficult to isolate all resembled each other and were found to be similar to the 1964 A<sub>2</sub> strains. The B strains resembled the 1959 strains and were isolated in tissue culture only.

Primary cultures of human amnion were introduced on a routine basis during the year and this greatly facilitated the identification of enteroviruses, particularly the echo virus, the commonest of which was Type 11. Of the eleven (11) strains of coxsackie B virus received, five were Type B4. Only five strains of polio virus were received and all were considered to be "vaccine-like".

The use of frozen stored primary tissue cells (cynomologus and African Green monkey kidney and human amnion) for routine tissue culture was instituted. This has saved labour and reduced the number of animals required. During the year a modified neutralization test for typing enterovirus and adeno-virus was introduced in order to speed up the procedures.

The Cytology unit has continued to keep a check on the chromosome constitution and viral sensitivity of all tissue culture cell lines used in these laboratories. Several new cell lines and cell strains have been added to the stock of cultures available.

#### Zoonoses Laboratories

This Laboratory continued to study the distribution and assess the importance to human health in Canada of animal diseases transmissible to man. A serologic study of Indians, resident on Indian reserves in Southern Ontario, has been carried out to assess the extent of their exposure to certain zoonotic agents now known to occur in either the domestic or wild animal life of this province. An examination of sera from 489 persons of ages 6 to 94 years for previous infection with California encephalitis virus



has shown that 34% have significant levels of neutralizing antibodies. The highest reaction rates were in the 6 to 20 year age group. There was no difference in reaction rates between males and females, a not unexpected result, since this virus is transmitted by mosquitoes and under the conditions existing on these reserves, no significant difference in exposure to mosquitoes between the two sexes is to be expected.

A study to determine the extent of the exposure to Q fever of persons associated with Q fever-positive dairy herds in seven counties of central Ontario was completed. Of 639 premises with Q fever positive cattle, 406 were visited and serum samples obtained from 371 volunteers. Sera from a second group consisting of 862 persons representing the general adult population of the area were also examined. In the contact group, 43% were found positive by the radioisotope test, whereas only 1.9% of the general population was positive. In addition, 511 sera from Indians of 3 Southwestern Ontario reserves were also tested for Q fever antibodies by this test and 2.0% were found positive. This study has demonstrated that sub-clinical Q fever infection is common among persons having frequent contact with Q fever positive dairy cattle and has also demonstrated the high degree of sensitivity and reliability of the radioisotope precipitation test. The frequency of clinically apparent infection is still unknown.

Identification of two viruses isolated in this laboratory from mosquitoes submitted by the Province of Alberta was completed. One of these was Cache Valley virus, which so far as known has not been isolated previously in Canada. The other isolate was Turlock virus, previously isolated once in Saskatchewan. The processing of more than 36,000 mosquitoes submitted in 1965 by the Saskatchewan group studying Western encephalitis was completed. Eleven (11) of 446 pooled mosquito samples were positive for Western encephalitis virus. The species of mosquitoes from which these viruses were obtained were: Culex tarsalis, Culiseta inornata and Aedes campestris. Further studies on the rickettsial isolate from snowshoe hare ticks collected near Richmond, Ontario in 1963, has finally confirmed that this is a new species of rickettsia and the name Rickettsia canada has been given to it. In view of the fact that Rocky Mountain spotted fever rickettsia occurs in American dog ticks on Indian reserves in Southern Ontario, residents of these reserves are being studied serologically to determine the incidence of exposure to this rickettsia and also to R. canada.

Rabbit ticks from 26 snowshoe hares were collected near Richmond, Ontario and rickettsiae have been isolated from 18. Five (5) samples of American dog ticks collected in the Molson-Pinawa area of Manitoba, submitted by the Atomic Energy of Canada, were found positive for Rocky Mountain spotted fever.

Studies on tick control were continued on Southwestern Ontario Indian reserves. Herbicide-insecticide formulations to control both brush and ticks along roadsides were developed and tested on roadside plots. The most effective was Herbicide-DDT which provided 91% control for at least 19 days. This formulation will be applied during 1967 by the Indian Councils of two reserves to all roadsides previously spread annually with only a Herbicide.



This Laboratory continued to provide provincial public health laboratories with standardized antigens and antisera for carrying out diagnostic tests for certain zoonoses. The volume of diagnostic antigens distributed during the year, when diluted for use, was in excess of 250,000 ml. as compared with 176,000 ml. for the previous year.

#### Administration

The Administration Section continued to function as a service unit to the scientific sections of the Laboratory. Despite serious staff shortages due to resignations, and under the most difficult circumstances, an all-time high of more than 8,000 liters of culture media were prepared by the Media room staff for use in the laboratories. The Workshop completed 422 work orders and 1,659 emergency work cards. The Administration section continued to supply mice, hamsters, rabbits and guinea pigs to the laboratories. The mouse, rabbit and hamster - breeding programs were quite successful, supplying to the laboratories 26,500 young mice and 1,000 pregnant females, 837 rabbits, 3,600 young and 223 pregnant female hamsters. We continued to have trouble with the raising of guinea pigs and are about to introduce a new line of breeding stock into our guinea pig breeding program. Our Stores unit met its responsibilities for the procurement and supplying of equipment and materiel, but was continually harassed by new directives concerning increased managerial responsibilities, cost accounting, new purchasing procedures etc., which have taxed to the limit our now totally inadequate personnel resources.

#### Parasitology

The Laboratory of Hygiene continued to supply parasitological reference services to the provinces through the Institute of Parasitology, Macdonald College, which by special arrangement serves as the Parasitology section of the Laboratory. During the year, 367 stool specimens were received for parasitological examination and were reported on. A case of cutaneous filariasis has been diagnosed in a young child, resident in Saint John, New Brunswick. The parasitic material is under study, although it will probably be difficult, if not impossible, to identify the nematode as to species. This infection has not previously been reported in Canada.

Nineteen (19) specimens were received for hydatid complement fixation tests, 5 (26%) of which were positive and serological tests for trichinosis were carried out on 125 serum specimens, most of which originated in the Province of Quebec. Of the latter specimens, 24 (19%) were positive and 35 (28%) were "doubtful".

Blood sera of 22 Indian patients with amoebiasis (including 3 with extra-intestinal involvement) from Saskatchewan, and of 6 non-Indian patients in hospitals in Ottawa and Montreal with unconfirmed amoebic infection were tested for amoebic antibodies by means of indirect hemagglutination and immuno-diffusion tests against an antigen prepared from Entamoeba-histolytica grown in vitro. Of the sera from the Indian patients, 100% were positive in the hemagglutination tests, but only 66% of the ones with extra-intestinal amoebiasis and 63% of those with intestinal amoebiasis were positive in the immuno-diffusion test. Of the sera from unconfirmed

cases, 50% and 33% were positive in the respective tests. The immuno-diffusion test was positive only when the serum hemagglutination titre was 1:512 or higher. These serological tests are still in the experimental stage; it will still be some time before we have sufficient confidence to use them routinely, but a research project to improve the reliability of the serological diagnosis for amoebiasis is being actively pursued.

As an aid to maintain a high quality of performance in laboratories carrying out parasitological examinations, "refresher" stool specimens have been prepared and sent out to the public health laboratories.



## OCCUPATIONAL HEALTH

After years of temporary accommodation, the Occupational Health Division, in January of 1966, moved into the new and excellently appointed Environmental Health Centre in Tunney's Pasture. These improved facilities have permitted larger scale planning and staffing and the Division will be in a position to extend its laboratory, technical, clinical training and consultant services in air pollution and occupational and public health.

These services have benefitted not only Canadian government departments and industry, but also international agencies such as the World Health Organization, the International Labour Organization, the International Union of Pure and Applied Chemistry, the Intersociety Committee on Methods of Ambient Air Sampling and Analysis, the Organization for Economic Co-operation and Development and the Permanent Commission and International Association on Occupational Health.

### Environmental Assessment Unit

The program of the Unit falls into two main categories: assessment and advice on control of air pollution in the atmosphere and industrial hygiene or the assessment and control of environmental hazards in work areas. Laboratory analytical services provide support for both and conduct research.

The activities are divided between surveys, assessments, monitoring and sample analysis of industrial and urban environments and applied research on analytical procedures, instruments, sampling and survey methods and equipment, on the other.

As in past years staff members acted as consultants to provincial health departments, universities and industry on air pollution, industrial hygiene and analytical problems. They served on national and international committees, delivered and published scientific papers and gave university lectures.

### Air Pollution

During this fiscal year air pollution activities were organized into: field studies, monitoring and engineering.

Among continuing field studies were: an examination of oxidants in urban and rural areas with the Department of Agriculture and a pre start-up atmospheric diffusion assessment at the Atomic Energy plant at Whiteshell, Manitoba, with tracer dyes. New studies included measurements of ozone evolved from ozone generating equipment and the studies of methods for automobile exhaust measurement and control.

The National Air Monitoring Program, with eight provinces contributing data, continued, as did air surveillance programs at Sydney and Glace Bay and the continuous measurement of temperature and wind direction and velocity from the meteorological tower in Ottawa.





The Environmental Health Center.



As it had served its purpose, the ship smoke surveillance program of many years' standing at Windsor was discontinued and replaced by pollution projects on behalf of the International Joint Commission at Sarnia and Windsor. Advisory service was continued to the Province of Nova Scotia on its heavy water plants. Staff members published seven scientific papers on such subjects as plant response to ozone and air pollution monitoring and control and served on five air pollution committees.

### Industrial Hygiene Services

Consultative services were continued to the Province of Newfoundland on radiation and dust at the St. Lawrence fluorspar mine. Stack and community air measurements for arsenic were made at Yellowknife and the Unit also continued to act as a clearing house for international information on industrial hygiene.

Other industrial hygiene surveys carried out included: lead-in-air determinations near an Atomic Energy of Canada lead furnace, a radiation survey at Echo Bay Mines in the Northwest Territories, dust and noise assessment in the Department of Energy, Mines and Resources laboratories; and radon daughter concentrations were measured at St. Lawrence Colomblum and Metals Mine at Oka, Quebec. In Ottawa working conditions at the Customs and Excise Laboratories and at the Department of Agriculture were evaluated.

Environmental factors engineering came in for greater attention this year. For example, ventilation surveys were made at the Post Office in Central Station in Montreal, the Royal Canadian Mounted Police Rifle Range at Amherst, N.S., and at the Department of Agriculture and the Food and Drug Laboratories in Ottawa. Working conditions at the Royal Mint in Ottawa and carbon monoxide concentrations at border crossing points in Windsor were studied. Practical standards for laboratory fume hoods were developed. Noise and vibration exposures of federal airport employees were studied and standards developed.

### Laboratory Services and Research

Under one aspect of this program a wide range of organic, inorganic and physical analyses of biological and chemical samples were carried out for other sections of the Division, federal and provincial departments and commercial and other agencies in connection with occupational health and air pollution studies. For example, some 7,000 determinations of potentially carcinogenic polycyclic hydrocarbons were made on air samples from Canadian cities, 1,000 determinations of arsenic in urines from the Yellowknife gold mining area, 1,200 analyses for lead in air, over 100 estimates of silica by X-Ray diffraction on dust samples received from seven provincial agencies.

Consulting services were provided for some 25 agencies on such requests as the determination of heavy metals in vegetables and soil, polycyclic hydrocarbons in air, development of instruments, reviews of health grants, dust classification and the physics of X-Rays.

Laboratory service staff members served on 17 national or international committees dealing mainly with such subjects as standardization of analytical instruments and techniques.

Three lectures were presented at scientific meetings and in addition 18 scientific papers were published.

Research was directed to developing more sensitive and accurate analytical methods and instruments, the main effort being toward methods of isolating, identifying and measuring atmospheric polycyclic hydrocarbons, a field in which the Unit is recognized as a leading world authority. The application of aqueous foams to dust suppression, air purification, sound damping and insulating was investigated for the first time. Fundamental research was also carried out on the fluorescence yield of elements exposed to X-Ray beams employing original filter modifications.

#### Biomedical Unit

The Biomedical Unit studies the health effects of deleterious factors present in the occupational and general environments. Its activities include: the development of methods and standards, educational and health surveillance programs, research and the provision of consultant services.

#### Clinical Consultant Program

An increasing number of requests for consultant services have been received from federal, provincial and other agencies on health hazards in the occupational environment. An important activity, once again, was the service provided during the New Brunswick forest spraying program and the study of health effects of exposure to the agricultural chemicals used in these aerial spraying operations. The Division's involvement with the health hazards of pesticides includes membership on a number of committees including: the Federal Interdepartmental Committee on Pesticides, the Federal Interdepartmental Committee on Forest Spraying, the National Research Council Subcommittee on Forestry and Agricultural Aviation and the Defence Research Board Committee on Pesticide Application.

A clinical survey of three hundred fluorspar miners and ex-miners was completed in Newfoundland. The investigators included officers from the Newfoundland Department of Health, the Occupational Health Division and the Department of Health for Ontario. The latter also participated with the Occupational Health Division and officers from Medical Services Branch in a clinical survey of residents in Yellowknife, N.W.T., where a study was conducted on environmental pollution by arsenic. The Laboratory of Hygiene provided part of the clinical laboratory services for the surveys.

The Steering Committee for the National Study of the Biological Effects of Asbestos, convened during the year, reviewed the progress made with various studies in Canada.



A preliminary survey of possible health effects attributable to air pollution in Windsor and Sarnia was begun in collaboration with the Department of Health for Ontario. This followed the International Joint Commission reference on trans-boundary pollution problems in the Windsor-Detroit and Sarnia-Port Huron areas.

#### Nursing Consultant Program

This program is directly concerned with the promotion of occupational health nurse consultant services, the assessment of the needs for occupational health nursing, the formal preparation and training of occupational health nurses, the development of standards and the planning and conduct of special investigations and research.

Considerable progress was made with a redefinition of the program. With the continuing lack of specialized education in occupational health nursing, a heavier than normal burden was placed on the consultant and priority had to be given to providing consultation to new nurses in new programs at the in-plant level. Other projects completed include: a census of occupational health nurses, the preparation of a comprehensive bibliography for occupational health nurses and participation, with the clinical consultants, in courses of lectures at McGill and Ottawa Universities.

#### Environmental (Analytical) Epidemiology Program

Health surveys were completed in three communities in Newfoundland and one in the Northwest Territories. These surveys were carried out in collaboration with the Newfoundland Department of Health and the Medical Services Branch of this Department. Their purpose was to determine the health status of the respective populations in relation to specific environmental factors. Eighteen summer students assisted with the collection of health and other information. The data are now being analyzed.

The occupational mortality study relating to an unusually high incidence of lung cancer among a group of miners is continuing. Data have been submitted to the Data Processing Service Bureau for coding, preliminary to a detailed analysis. A statistical model for use in occupational morbidity studies has been developed in collaboration with the Insurance Department.

#### Pathology Program

This section continued to provide pathology service to other sections of the Unit and to conduct experimental pathology studies. An Experimental Pathology Program was developed to evaluate potential pulmonary dust and other chemical hazards. The histogenesis of lung cancer in relation to specific environmental factors was investigated. Attention was also given to possible additive and/or enhancing factors.

A limited pilot study to determine the incidence of "asbestoid" bodies in lungs of Ottawa residents was conducted. The incidence was lower than that reported in other studies. The second year of a five-year sputum cytology study was completed. This was aimed at detecting and evaluating the significance of early typical changes occurring in a group of miners

exposed to radioactivity. Clinical pathology studies were also completed as part of the two clinical surveys carried out by members of the Biomedical Unit.

#### Environmental Toxicology Program

Good progress was made in the standardization and development of biochemical and toxicological research techniques and the assessment of the toxicity of industrial compounds. Work done in this field included a comparison and a critical evaluation of three methods of assessing spontaneous motor activity in experimental animals. These methods detected discreet changes in motor activity occurring after exposure to low concentrations of, for example, industrial solvents.

An experimental study of the threshold limit value of petroleum naphtha was completed. The data suggested that the existing value of 500 ppm should be reduced to 250 ppm. Studies on the metabolism of this compound showed that the determination of glucuronic acid in urine was a reliable method of assessing exposure in animals.

An evaluation of testing methods for carcinogenic activity continued. In addition to routes of exposure, the influence of species and of chemical structure was investigated. Studies on the metabolism of environmental carcinogens led to the discovery of several new bladder cancer-inducing substances.

#### Enzyme Chemistry Program

The Enzyme Chemistry Section continued its study of the response of the enzyme systems of experimental animals as an index of exposure to toxic materials in the environment. This year's investigations were directed toward developing simple and accurate methods for determining enzyme activities and the inhibition and reactivation rates on these systems of new compounds, particularly the organophosphorus and carbamate insecticides. A project to investigate the antagonistic or synergistic effect of these chemicals on each other's toxicity, when they are applied in mixtures, was under consideration.

#### Administrative Unit

#### Training and Teaching

The Division provided practical training for 22 summer students from Canadian Universities mainly on the arsenic problem at Yellowknife, N.W.T. and on the radon and dust studies in the fluorspar mines in Newfoundland. A Colombo Plan student spent a year with the Division.

#### Educational and Technical Services

The Division publishes the quarterly Occupational Health Review, a technical and professional journal and the Occupational Health Bulletin, a monthly publication that has wide general distribution and deals with occupational health subjects in a manner interesting to both professional



and lay groups. Most of the material published in the Review and the Bulletin was written by staff members.

Lecture material was supplied to medical and nursing schools in Canada and staff members delivered lectures on health topics at several universities. As usual a great quantity of material was provided for school children for projects.

The Division continued to keep abreast of developments in occupational health and air pollution, correlating information from international sources and conducting research to maintain its usefulness to Canada in the promotion of better facilities for the control of conditions that could affect workers or the public health. The demand for its help from provincial, municipal and industrial organizations in planning surveys, teaching and training of staff and consultations on problems of appraisal and engineering and medical control of hazards in air pollution and occupational health as usual continued to expand.

## AEROSPACE MEDICINE

The office of Consultant, Aerospace Medicine, moved from the Brooke Claxton Building to the Environmental Health Centre to be more closely associated with the resources that relate to environmental health research. The office provided consultant and advisory service to the Department of Transport, Air Services, the Departmental Medical Services Branch, other Government Departments and interested agencies, on the medical problems associated with the health, comfort and safety of the air traveller.

Civil aircraft accident investigation was given top priority. Guidance was provided on the medical investigation and reporting of several major airline accidents and the human factors aspect of a number of small aircraft accidents. Work was continued on the development of guidance material on the medical aspects of aircraft accident investigation for Departmental Medical Officers. Procedures for assembling and co-ordinating Federal, Provincial and local medical resources were studied. This was done in consultation with Department of Transport, since the Air Regulations for Accident Investigation have been amended. The development of an aircraft accident investigation post-mortem kit was started. Statistical studies relating to health factors in pilots involved in civil aircraft accidents were continued.

Although no major changes were recommended in the Physical Standards for Civil Aviation Personnel, liaison with centres where medical research is being undertaken was maintained. Special studies regarding the development of a Canadian colour perception lantern for use by all transportation systems was initiated through the Defence Research Board. As well, studies relating to the testing of hearing by audiometry and voice were continued in collaboration with the Department of Veterans Affairs.

Advice was given relating to environmental health studies for Department of Transport Air Services operations, particularly Air Traffic Control. Studies were continued, also, on potential hazards of jet aircraft noise, particularly, the need for a hearing conservation program for Federal employees, at major airports.

Further aeromedical training for Departmental Medical Officers, especially on the medical aspects of civil aircraft accident investigation and crash preparedness at airports, was planned.

The need for aerospace medical research for Canadian civil air operations continued to be reviewed, particularly as it relates to human factors associated with the introduction of the jumbo jets and supersonic transport. Discussions were held with the Department of Transport to identify medical problem areas in civil aviation that might be studied through support from the National Health Grants.

A report was prepared on the life sciences resources available in the Department for the study on high altitude and space research in Canada.



Instruction was received at the Aviation, Safety and Engineering Research, Flight Safety Foundation in the United States on the theory and application of crash survival investigation concepts. Pre-crash medical planning, particularly at major airports, was promoted.

The increase in the use of the aeroplane for agriculture and forestry was noted, and the health aspects of the aerial application of pesticides as it relates to the operators was considered. The health and safety aspects of the Canada Labour (Safety) Code as it may effect civil aviation personnel in Canada was studied.

Participation at international aviation medical conferences and liaison with aeromedical research and safety centres throughout the free world were included in the activities.

An Aerospace Medical display was presented at the formal opening of the Environmental Health Centre.





Laboratories of the Radiation Protection Division.



## RADIATION PROTECTION

Activities of the Division are directed towards protection of the health of radiation workers in industrial and medical establishments and to the assessment of the exposure of the general population from all sources of ionizing radiation including fallout from nuclear tests.

### Staff

Total staff establishment was increased from 79 to 84 positions. The increases provided for four professional positions and one technical position.

### Biological Dosimetry

Work has continued on the investigation of possible biological indicators of radiation injury. In particular, cytogenetic studies have shown considerable promise of providing a suitable indicator of radiation exposure, even at low-dose levels. A tissue culture facility is working well and it has been possible to investigate people exposed to both external radiation and internal radiation from cesium-137 and uranium oxide as an insoluble atmospheric dust.

### Radionuclide Metabolism

As part of a collaborative effort with other parts of the Division, a number of studies of the metabolism of uranium and cesium have been undertaken. In a few cases it has been possible to carry out detailed balance studies and these have yielded new information which has been helpful in determining the health significance of the exposure.

### Diet Study

Work has continued on the strontium-90 in diet study. A pilot study of a "standard" teen-ager diet has been investigated and preliminary results suggest that the relative strontium-90 contribution of the non-milk part of the diet is larger than had been previously thought. This work is being continued. The long-term extension of this work will depend upon evaluation of the first year's teen-ager diet study.

### Radioisotope Utilization and Safety

As principal health and safety adviser to the Atomic Energy Control Board, the Division plays a central role in ensuring the safe use of radioactive material in industry, medicine and research. The potential hazards from all uses of radioisotopes are assessed and precautionary measures drawn up in order to protect the user and others in the environment and at the same time not unnecessarily hinder utilization of radioactive devices and techniques.

The Division has introduced more efficient procedures to assess the health and safety aspects of the ever increasing number of applications for licence to use radioactive materials. A total of 1384 licence applications

were scrutinized during the year. Of these, 212 were for medical purposes, 571 for research, 309 for industry and 292 for miscellaneous uses. In addition, 936 applications for amendments to existing licences were examined and dealt with. Since a high incidence of accidents had been noted in the industrial uses of radiography, the Division introduced new procedures to ensure that only qualified persons are allowed to handle radiography sources.

The Department's Advisory Committee on Clinical Uses of Radioisotopes was reorganized to make it a more effective agency for advice on the use of radioisotopes in medical practice. In accordance with the recommendations of this Committee, most of the known sources of medical radium had been brought under licensing controls by the end of the year. In collaboration with the Food and Drug Directorate a closer scrutiny was made of radiopharmaceuticals supplied for human use.

Field trips are carried out in order to give safety advice to users of radioisotopes, to ensure that the terms and conditions of the licence are being followed, to assess potential hazards, and to investigate high exposures or contamination incidents. During the year, 472 inspection visits were made. Although there were a number of incidents of high radiation exposures, none caused serious harm to the workers involved.

#### Film Monitoring Service

The demand for the film monitoring badges supplied by the Division continued to grow. The number of persons using the beta-gamma service at the end of the year was 21,000 -- an increase of approximately 14% over the previous year. Corresponding figures for the neutron monitoring service and the criticality badge service were 550 and 315, respectively. In addition a total of 1900 films were used by the Emergency Measures Organization Training Courses.

#### Training Courses

Short-term radiation protection training courses were provided for radiation workers in industry. A total of 74 persons attended the three courses presented by the Division during the year. A training manual entitled "Radiation Hazard Control in Industry" was compiled and published. From the favorable reception received it is apparent that these activities are helping to meet an urgent need.

Instructors were also provided for training courses arranged by provincial departments and other organizations. The Division continued to cooperate in training and examining industrial radiographers in the health and safety requirements for certification under the Canadian Government Specifications Board's Standards 48, GP-4.

#### X-ray and Particle Accelerator Safety

Studies have been initiated on procedures to reduce the exposure of operators of x-ray machines and of patients undergoing diagnostic examinations. A detailed pilot investigation of dental x-ray equipment and techniques was completed. The results indicated that, in a considerable



number of the machines, the amount of unnecessary or "stray" radiation could be reduced by closer adherence to recommended practices.

Radiation surveys were carried out in hospitals, industries and universities, as requested. Consultative advice was provided on x-ray laboratory installations and shielding lay-outs.

Two safety codes, "X-rays in Medical and Dental Radiography - Installation and Safety Procedures" and "Specifications for Medical, Dental and Para-medical X-ray Equipment", were prepared and reviewed in discussion with radiologists, health officials and other experts.

The Division continued its activities on the Advisory Committee on Safety of Particle Accelerators. Three new installations were reviewed.

### Nuclear Reactor Safety

The Division continued its participation in the discussions of the Atomic Energy Control Board's Reactor Safety Advisory Committee. The site of the Gentilly nuclear power plant in Quebec was approved. Detailed assessments were carried out -- on the nuclear generating station at Douglas Point, Ontario and the proposed station at Pickering, Ontario.

Studies were also made to assess potential hazards arising in nuclear fuel fabrication facilities. It was found that careful control procedures must be exercised to prevent the inhalation of uranium oxide dust in the processing operations. A number of employees who had acquired an undesirable "body burden" of uranium were identified and examined. More stringent control procedures were recommended and introduced in the operations involved.

### Reactor Environment Monitoring

Environmental studies were continued near the sites of the Chalk River reactors, the NPD (Des Joachims) power reactor, the Douglas Point (CANDU) reactor and the Whiteshell reactor at Pinawa, Manitoba. This monitoring operation involves the radiochemical analysis of water supplies at neighbouring communities, and the measurement of the strontium-90 content of milk and other biological materials in each region.

### Radioactive Fallout

The monitoring of air, precipitation, soil, milk, wheat, drinking water and bone for radioactivity was continued. In general, fallout levels decreased during the year, although significant concentrations of the long-lived elements strontium-90 and cesium-137 remained evident. Following the Chinese nuclear tests in May, October, and December, 1966, fresh fallout isotopes were observed in air and milk samples but the amounts were not considered significant and the short-lived activities decayed away in a few weeks.

The special study of fallout levels in the North was continued. It has been found that Northern residents who consume relatively large quantities

of caribou or reindeer meat have larger amounts of cesium-137 in their bodies. The study includes radioactivity measurements on human urine specimens and caribou meat samples.

Co-operative studies with other laboratories were continued both at a national and international level.

Data from the fallout programs are published regularly in the monthly report "Data from Radiation Protection Programs".

#### United Nations Program

Samples of milk, pulse, wheat and soil from Pakistan were analyzed for strontium-90 under the United Nations' co-operative study of radioactive fallout.

#### Radiochemical Studies

In co-operation with the Occupational Health Division, exploratory work was carried out to determine the levels of naturally-occurring radio-isotopes at St. Lawrence, Newfoundland. It was found that radon levels in water from wells in the region were markedly higher than normal, but not, however, as high as in certain other local regions in other parts of the world.

Considerable advances were made in the development of special techniques for determining the radioisotopes involved in such studies.

#### Whole Body Counter

Studies of Cs-137 levels in Northern Canadian residents were continued and liaison between RPD and the Departments of Transport and Northern Affairs provided contact with such persons when they visited Southern Canada.

Using volunteers from the RPD staff, studies of Cs-137 metabolism were conducted with the co-operation of the division's Medical and Biology Sections. These particular studies have been extended and will continue throughout 1967.

Follow-up measurements of whole body potassium and Cs-137 body burdens were conducted for a large group of high school students. Repeat measurements were possible on a group totalling 200 and 100 new students (Grades 9/10) agreed to participate in this program.

Studies of both Cs-137 and UO-2 accidental contamination are being conducted. For the latter group, (14 potentially exposed persons) repeat whole body measurements and extensive excreta sample measurements have been made over a period of several months.

A portable whole body counting facility for Cs-137 measurements was constructed and two field trips made during 1966; the first, in conjunction with the Department's Northern Health Services X-ray surveys; the second, to Alaska (Annaktuvuk Pass) accompanying a U.S. research team from



Battelle Northwest Laboratories (Richland, U.S.A.). Future field studies are planned for the spring and summer of 1967.

The laboratory instrumentation is under continuing investigation and several improvements in technique are being implemented to optimise detector sensitivities, and also to specify data output formats for computer processing.

#### Development Physics

Investigations of new techniques for the dosimetry of particulate radiation were continued. In particular, attention was given to:-

- (i) nuclear emulsion for neutron dosimetry;
- (ii) thermo-luminescence techniques for beta, gamma and neutron irradiation;
- (iii) solid state devices and their application to radiation protection and control;
- (iv) a criticality personnel dosimetry system for the complete evaluation of exposures in accident situations involving fissionable materials.

Recent, new equipment acquisitions now allow an appraisal of solid state devices for high resolution alpha spectroscopy of sample material resulting from the reactor environmental monitoring program.

## PUBLIC HEALTH ENGINEERING

The activities of the Division are directed towards the promotion and preservation of health of the people through the application of engineering principles and scientific knowledge to problems associated with, and affecting man's comfort and enjoyment of his total environment. The statutory responsibilities of the Division to accomplish this primary objective are contained in the Department of National Health and Welfare Act. Basically the programs conducted encompass three major activities - advisory and consulting services to federal and provincial agencies, water quality and pollution assessment, and research.

### Advisory Committee on Public Health Engineering

The first meeting of the Advisory Committee on Public Health Engineering was held on January 17 - 18, 1967. This Committee was formed to assist and advise the Minister through the Dominion Council of Health on matters related to Public Health Engineering. Its primary functions are to identify environmental engineering problems, to promote and co-ordinate areas of research and to establish national criteria in this field.

### Staff

The total establishment increased from 80 to 98 positions during the year. This increase occurred in both professional and technical staff and was due largely to the commitments to the International Joint Commission for water pollution studies associated with the Great Lakes and also the research development program now being initiated.

### Investigation of Boundary Water Pollution - International Joint Commission

During the year active interest was generated in the pollution situation in the St. Croix River. Engineering plans to provide modern waste control are being developed by the bordering municipalities and industries.

Surveillance of the Connecting Channels of the Great Lakes and the Rainy River was maintained with respect to water quality assessment.

The water pollution surveys of the Red River were essentially complete and preparation of the Advisory Board's report on this reference study has commenced.

Water quality studies under the I.J.C. pollution reference, covering Lake Erie - Lake Ontario and the International Section of the St. Lawrence River represented a major activity and use of the Division's resources and funds during the fiscal year, in co-operation with other federal and provincial agencies.

Nine regular monitor cruises and three special cruises were conducted in the deep water section of Lake Ontario, in addition to shorewater assessment at designated ranges in the Bay of Quinte area of Lake Ontario, and throughout



the entire one hundred and fourteen mile International Section of the St. Lawrence River. In excess of fourteen thousand samples were collected and analyzed for bacteriological and chemical properties.

Two fully equipped laboratories, one land based at Kingston, and the other aboard the M. V. Brandal were operated under the Great Lakes I.J.C. program. Eighteen professional and technical staff with clerical support were employed in these studies, with additional assistance from summer students. Automatic chemical analyzers were installed in both laboratories and had a significant bearing on the volume of work accomplished and on the success of these operations.

Shellfish Control

Under the Bi-lateral Memorandum Agreement on Shellfish, signed by the Canadian Ambassador and the United States Secretary of State, dated March 1948, the Department of National Health and Welfare administers the shellfish control program in Canada.

Pollution Assessments - At the request of the Ministry of Health for the Province of Quebec, public health engineering and bacteriological surveys were conducted at seven growing areas in the Baie des Chaleurs.

In British Columbia the shellfish sanitation program was under continuing review, with a major survey initiated in Ladysmith Harbour.

Shellfish growing area pollution studies were conducted in the Atlantic Provinces in fourteen sectional areas, eleven of which received detailed bacteriological assessments utilizing the mobile laboratory.

Both British Columbia and the Bay of Fundy area in the Maritime Provinces were reviewed by a U.S. Public Health Service shellfish consultant, according to the terms of the bi-lateral shellfish agreement.

Paralytic Shellfish Poison Control Program - A total of 2,557 shellfish extracts were submitted to bioassay tests (involving 13,400 laboratory mice) for paralytic shellfish poison (PSP):

|                                                               |     |
|---------------------------------------------------------------|-----|
| New Brunswick Area Control:                                   | 634 |
| Fisheries Research Board of Canada<br>(Research, East Coast): | 202 |
| Nova Scotia Area Control:                                     | 72  |
| Quebec Area Control:                                          | 913 |
| British Columbia (Control and Research):                      | 736 |

This represents a reduction of 549 specimens from the total number (3,106) submitted for testing in 1965-66, and reflects a reduction in the Quebec sampling program made in response to a recommendation by this Division.

In addition, studies of the accuracy and reproducibility of the bioassay tests for PSP were continued when mice were available for this purpose.

Staff members continued to provide advisory services to the Department of Fisheries on problems concerning the control of PSP in Canada.

The sanitary bacteriology unit of the Laboratory of Hygiene was transferred, in January 1966, to form the nucleus of the bacteriological laboratories of the Public Health Engineering Division. The bacteriological laboratory conducts the PSP control program and operates a mobile laboratory for the evaluation of bacteriological pollution in shellfish growing areas.

Advisory Services to Crown Corporations, Boards and Federal Departments

Under the Atlantic Development Board's program to provide financial assistance in the abatement of industrial wastes discharged to the fresh water rivers in the Atlantic Provinces, thirty individual industries were surveyed; fourteen in New Brunswick; eleven in Nova Scotia and five in Prince Edward Island.

Advisory and technical services were provided to the Atlantic Development Board on that agency's program to conduct a water resources survey in the Atlantic Provinces.

Expo 67 - Water pollution surveys were completed in the Area of Expo 67 with intensive work done in the Bickerdike Basin, adjacent to Mackay Jetty, the aquatic sports area and the Marina Basin. Consultation and technical services were provided for the general public health engineering and environmental problems of Expo.

National Harbours Board - Water pollution and environmental factors received special attention with the appointment of the Port Health Advisory Committee at Montreal. This work was co-ordinated with the special considerations of Expo.

Other Organizations Seeking and Receiving Technical Services - These included Northern Transportation Company; Industrial Development Bank; Central Mortgage and Housing Corporation; National Research Council and Fisheries Research Board.

Investigations were conducted in the Northwest Territories for the Department of Fisheries on the health problems associated with the packing of fish for export.

Pollution Control from Federal Properties

Advisory and technical services on environmental engineering problems were provided to many federal departments, on a request basis, in order to prevent, evaluate and restrict health hazards.



This Department has recently been assigned the responsibility of administering a program to control pollution emanating from federal properties on a more formal basis. This is being undertaken.

#### Advisory and Technical Services to Provinces

Advisory and technical services are extended to the provinces on a request basis.

For the Province of Newfoundland the Division continued a program to provide and update chemical analyses data on all municipal water supply sources. A specific objective of this program is to provide basic data on natural fluoride concentration in actual and potential water supply sources.

Interpretative comments are provided on all chemical analyses and general recommendations are offered where water system protection against corrosion appears warranted. Active, or corrosive water is general throughout many areas of the province.

In compliance with a request from the Newfoundland Department of Health, the Division developed a water quality control and record system, applicable to municipal water systems in Newfoundland.

For the Province of New Brunswick a dissolved oxygen survey was conducted in the future Mactaquac headpond reach of the Saint John River.

Technical services were provided to the New Brunswick Development Corporation on the establishment of water supply and sewage disposal facilities at Champlain Industrial Park.

At the request of the Quebec Water Board and of the National Capital Commission, a pollution survey was made of Leamy Lake, located in Hull, Quebec. The major and minor sources of pollution were detected, localized, and reported on. Recommendations were made for removal of a trunk sewer overflow.

Surveillance of the satisfactory installation of a water treatment plant of the Quebec Ministry of Industry and Commerce, at Paspébiac was continued.

Engineering assistance and co-operation were extended to the Manitoba Department of Health during the Red River Valley floods of 1966.

Advice was provided on request, regarding the Prince Rupert water supply, copper corrosion in municipal and domestic water supplies, and the classification of chemicals for treatment of potable water.

#### National Health Grants Program

During the fiscal year the Division provided a regular consultant service to the Health Grants Administration. A total of \$618,775 was approved for the support of environmental sanitation services across

Canada. This involved projects dealing with training and assistance to provincial health services in carrying out water pollution control, milk and food inspection programs, and general sanitation.

Under the Public Health Research Grants Program, the Division encouraged new and continuing research studies among various agencies having research capabilities. Some of the new projects are as follows: University of Saskatchewan, Anaerobic lagoons - a field laboratory study of their efficiency and limitations in sewage treatment; University of Saskatchewan, survival and multiplication of enteropathogenic and non-enteropathogenic coliform bacteria in Canadian dairy products; University of Toronto, the ecology of the microbial population of "Activated Sludge"; Lakehead University, a study of the effect of industry on an "Aquatic Ecosystem"; University of Waterloo, effectiveness of coal as a filtration adsorption media for the "Treatment of Domestic Sewage"; University of British Columbia, investigations into techniques for improving the amount and efficiency of oxygen incorporation into rapid-rate biological waste treatment systems.

#### Research Group Activities

The Research Group, within the Division, was started in June 1966 with the appointment of a director. Three professional members comprise the staff at the present time, all of whom have published the results of water pollution research in leading technical journals. Two research scientists, one chemist and one engineer joined the staff during the year and other research appointments to this group are being planned for the coming year. It is expected that the recruitment and training for the Research Group will be accelerated over the next few years.

Several research projects are in the planning stage. These are related to water quality improvement through chemical removal of water pollutants by: Foam separation; adsorption and oxidation. Planned biological projects involve the activated sludge process, trickling filters, digestors and related studies. Equipment has been acquired that will enable the foam separation and oxidation studies to be undertaken immediately. Most of the biological waste water improvement studies will be conducted in a pilot plant. The pilot plant is being designed by a firm of consulting engineers, and is in the detail design stage.

The pilot plant will treat 20,000 Imperial gallons of waste water per day. Half of the flow will be treated by the activated sludge process; while the remainder will be treated by trickling filters. Each process will be followed by clarification. As well, there will be an aerobic and an anaerobic sludge digester. The arrangement of pilot plant units will permit comparative studies on the various processes.

A co-operative training program, with the University of Waterloo, was started in January 1967. Two undergraduate civil engineering students spent their first four-month work term with the Research Group. Students participating in this program are rotated between work and study periods, each four months. The plan has proved to be of benefit to both the students and to the Division.



## Health Education and Training Program

Three senior engineers were granted educational leave for post-graduate training. In addition, advanced short-term courses were attended for specialized training in such areas as: Urban planning for environmental health; water quality studies; shellfish sanitation; aquatic biology for engineers.

Senior personnel participated in a number of scientific conference sessions as chairman, co-chairman and as authors of technical papers. These included: the Resource Ministers Conference on Water, Air and Soil Pollution - Montreal, November 1966; the Second Annual Symposium on Water Pollution Research - McMaster University, January 1967; the Atlantic Provinces Water Conference.

Lecture material was prepared and presented at the university-sponsored water and wastes school in British Columbia and Alberta. One lecture was presented at the University of Ottawa on the activities of this Division, and another before the Association of Provincial Engineers at Kingston, by a senior research scientist, on "A Chemical Approach to Pollution Abatement".

Lectures and instructions were given at the Emergency Measures Organization College at Arnprior, concerning water supplies and food sanitation in disaster, at courses sponsored by Emergency Health Services and Emergency Welfare Services.

Scientific publications of the Division included nine technical papers covering a wide range of public health engineering subjects. A list of titles of these publications are available on request.



One of the areas of interest of the Medical Rehabilitation Division is the kind of treatment being given to this small handicapped boy.



## MEDICAL REHABILITATION

The responsibilities of the Medical Rehabilitation Division have been increased in recent years, and have evolved into four distinct areas which are described under the sectional headings, "Medical Rehabilitation", "Prosthetic Services", "Disability Evaluation", and "Blindness Prevention".

### Medical Rehabilitation

The primary aim of this service is to stimulate, encourage and assist provincial health departments in planning and developing balanced programs whereby medical rehabilitation facilities and services will be available to every disabled child and adult in Canada who is able to profit thereby.

The work of the consultants included technical appraisal and advice on projects under the Health Grants Program, particularly projects submitted under the Medical Rehabilitation and Crippled Children Grant. Advice was provided on projects for the establishment and/or operation of facilities for the treatment and rehabilitation of disabled persons of all ages; on projects related to the training of medical and paramedical members of the rehabilitation team; and finally, on research projects in the field of medical rehabilitation.

The Division continued to work with the Civilian Rehabilitation Branch of the Department of Manpower and Immigration on its program of vocational rehabilitation of disabled persons, carried out through federal-provincial agreements under the Vocational Rehabilitation of Disabled Persons Act. Among other features that Act provides for sharing agreements with the provinces to purchase comprehensive rehabilitation services for disabled persons who may thereby be restored to a substantially gainful occupation, or to dispense with the regular home service of an attendant. These provisions complement the applications of the Medical Rehabilitation and Crippled Children Grant which assist in the establishment and development of rehabilitation facilities and in the provision of services to children and those adults not within the terms of reference of the Vocational Rehabilitation Act.

The Division's staff played an active role within and beyond the Department in conferences, seminars and committees concerned with a variety of subjects to which medical rehabilitation is relevant. Field visits to the various provinces were made to study current developments in medical rehabilitation. Statistical and other reference material on rehabilitation facilities and on medical and technical training were kept for information purposes and presentation to organizations, committees and conferences. Consultant services were also provided for the production of information material, educational pamphlets, radio scripts and films in the field of medical rehabilitation. Visitors from other countries were welcomed and assistance was given in planning or conducting study tours on their behalf.

## Prosthetic Services

Under P.C. 1965/218 transfer of the control and supervision of the Prosthetic Services from the Department of Veterans Affairs to the Department of National Health and Welfare was authorized effective April 1, 1965. This date was the starting point from which successive steps have been taken towards completion of the transfer process. Full operational responsibility was assumed January 1, 1966. Since that date it has been necessary to work out at considerable length the administrative details related to this new area of activity for the Division.

The services provided during the fiscal year were those related to artificial limbs, braces and orthopaedic boots. The facilities consisted of a Central Prosthetic Establishment at Sunnybrook Hospital in Toronto and eleven District Centres at Halifax, St. John's, Montreal, Ottawa, London, Winnipeg, Calgary, Regina, Edmonton, Vancouver and Victoria. The establishment at Sunnybrook Hospital in Toronto was the main manufacturing facility for prosthetic appliances as well as being a procurement centre for basic raw material for distribution to other centres. It also operated a research section to develop and test new prosthetic and orthopaedic appliances, investigate new materials and evaluate outside developments. It served, as well, as a training centre for staff from other centres. In addition to the services in the twelve Centres, visiting fitting services were provided at Charlottetown, Kingston, Hamilton, Windsor and Saskatoon.

With respect to services, the needs of veterans are of paramount consideration and the Department has acknowledged these needs as a first charge on the Service. Payment for services to entitled veterans is made by the Department of Veterans Affairs.

Since the provision of prosthetic services to non-veterans is a matter for consideration within provincial health programs, arrangements have been made through the appropriate authorities in several provinces whereby residents of the province may have, on referral by a physician, access to the use of the facilities on the basis of payment for services rendered. Discussions with the remaining provinces are under way to determine if or how the facilities might be used according to the needs and arrangements within each province.

Due to the changing nature of the population being served, and for other reasons as well, it was felt that a re-organization of the Service would be required. Detailed plans to that effect were worked out during the year to be implemented April 1, 1967.

## Disability Evaluation

A consultant function was maintained with respect to the evaluation of disability in the determination of medical entitlement to Disabled Persons Allowances. The medical decisions of entitlement under this program are made by joint federal-provincial medical review boards, the manner in which these boards are convened varying from one province to another. The 15 federal medical representatives on these boards have reported that during this fiscal year some 22,500 applications were processed by these boards.



Advice and assistance in the planning, development and operation of the medical aspects of the Canada Pension Plan disability benefits have been requested. The preparatory work which was begun in the previous fiscal year increased considerably, and by the end of the 1966-67 year was about to enter a phase of major activity.

The Division also provided consultant services to the Welfare Branch with respect to the medical aspects of the Youth Allowances Program.

### Blindness Prevention

This area of activity included responsibilities in relation to allowances under the Blind Persons Act and Regulations; the supervision and administration, in collaboration with the provincial authorities, of a treatment plan for restoration of vision for recipients of Blindness Allowance under P.C. 3-666 of February 4, 1952; and the provision of a national consulting and co-ordinating service in the field of blindness prevention.

With regard to Blindness Allowances, the responsibilities included the authorization of eye examinations of applicants for Blind Persons Allowance, special services therefor in remote areas, reviewing eye examination reports to determine medical eligibility for Blindness Allowance and the issuing of certificates to the provincial authorities. The section also kept the roster of examining oculists at the required strength and maintained the records through which the fees of the examining oculists were paid.

A total of 1,139 eye reports and some 6,289 reports from provincial field workers were reviewed by the Division in the determination process. 985 applications were dealt with during the year.

The analysis of causes of blindness among persons granted the Allowance in each fiscal year has been continued. Figures for this year's group of 645 persons reveal congenital and developmental conditions, and cataracts as the two leading categories of disease causing blindness. Glaucoma some years ago was reported as responsible for 11-12% of blindness. The experience in recent years with Blindness Allowance recipients gives support to the belief that glaucoma control measures are taking effect.

Number and percentage distribution of new Blindness Allowance Recipients, April 1, 1966 to March 31, 1967, by diagnostic groups:

| <u>Diagnostic Group</u>       | <u>Number</u> | <u>Percent</u> |
|-------------------------------|---------------|----------------|
| Congenital (1)                | 124           | 19.2           |
| Lens and cataract             | 82            | 12.7           |
| Diabetic retinopathy          | 70            | 10.8           |
| Optic atrophy                 | 62            | 9.6            |
| Degenerative myopia           | 64            | 9.9            |
| Glaucoma                      | 48            | 7.4            |
| Corneal scars and dystrophies | 33            | 5.1            |
| Retinitis pigmentosa          | 54            | 8.4            |
| Chorioretinitis, Uveitis      | 29            | 4.7            |
| Others (2)                    | 79            | 12.2           |
|                               | <hr/>         | <hr/>          |
|                               | 645           | 100.0          |

(1) Includes congenital cataracts

(2) Others include macular degeneration (3.2%), Injury (2.2%), Retinopathies (2%), Retinal detachment (2.5%), Retrolental fibroplasia (1.1%), and miscellaneous others (1.2%).

In relation to the treatment plan for recipients of Blind Persons Allowance whose vision may be restored, agreements under which the Federal Government paid 75% of the cost of services were in effect with nine provincial welfare departments. Treatment of 71 cases was completed during the year. In 59 cases vision was restored to the extent that the person was no longer blind, and in some of the remaining cases a significant restoration of guiding vision was obtained. Since the plan began in 1948, 1,259 recipients of Blindness Allowance have received treatment which was successful in 994 cases.

Liaison was maintained with hospitals, specialized clinics, universities, professional bodies and voluntary organizations active in the field of blindness prevention, with the aim of stimulating, encouraging and assisting provincial health departments in planning and developing balanced programs.



Advice and technical appraisal was provided on projects under the Health Grants Program which concerned the preservation of vision. The projects related to services such as glaucoma, retinal detachment, orthoptic and other special eye clinics; to training in ophthalmology and related fields; and to research directed at some of the main causes of blindness.

Consultant services were provided to the Ottawa Bureau of the Medical Services Directorate on ophthalmological matters related to applications for flying licences. A public educational program was carried out in co-operation with provincial authorities, by means of pamphlets and radio scripts.

## EMERGENCY HEALTH SERVICES

The Emergency Health Services Division provides assistance and advice to provincial and municipal governments and to others, in connection with the planning, organization and operation of health services for an emergency in time of war or peace.

### CONTINUITY OF GOVERNMENT PROGRAM

The Division continued progressive studies related to the emergency operation of the health organization in alternative locations.

Under this program, the federal health department has now reached an advanced state of planning. Departmental personnel allocated to an emergency position within Health Services attended an exercise briefing given by members of Emergency Health Services, prior to taking part in Exercise Tocsin '66 at the Canadian Emergency Measures College, Arnprior, Ontario in October 1966.

Most provincial and a few municipal health departments have made good progress under this program. Much, however, remains to be done, especially by the health departments in those municipalities liable to suffer from the effects of nuclear weapons.

### ORGANIZATIONAL PROGRAM

All provinces and the Northwest Territories now have full-time Emergency Health Services staffs, and the majority have established Emergency Health Services Advisory Committees composed of representatives from provincial colleges, professional societies and associations. With a few exceptions, continuing efforts to encourage municipalities to appoint an Emergency Health Services Director were less successful.

Officers of this Division continued to participate in numerous conferences, seminars and symposia, and to assist with provincial Hospital Disaster programs. Three hundred and thirty-five hospitals have now received stockpile supplies in recognition of their satisfactory planning.

In order to assist community health units with their emergency planning, a series of special courses was conducted at Canadian Emergency Measures College, Arnprior, for the benefit of public health physicians, nurses and others in the public health team.

### INFORMATIONAL AND EDUCATIONAL PROGRAM

A major part of the efforts of Emergency Health Services was devoted to this program, which involved the Division in continuing participation in Federal committees, Defence Research Board panels and programs of national health associations. Continuing assistance was provided to provincial health associations at conventions and meetings. Liaison was maintained with the British, United States and North Atlantic Treaty Organization authorities.



The following publications were produced during this period: "Advanced Treatment Centre Operating Manual"; "Advanced Treatment Centre Technical Guide"; "Casualty Collecting Unit Technical Guide"; "Emergency Hospital Operating Manual"; "Environmental Health in Disaster".

Twelve sets of table top displays of "The Emergency Hospital" were produced and distributed to Provincial Emergency Health Services.

Emphasis continued to be placed on First Aid and Home Nursing training. Approximately 800 federal employees received training in First Aid and Home Nursing in 1966 through the St. John Ambulance Association Federal Government Centre, a part of the Emergency Health Services Division. The overall average of federal employees trained is now 5.2% of the total employed.

In all, some 135,500 persons throughout Canada were trained in First Aid and some 2500 in Home Nursing by the St. John Ambulance Association.

The following courses and conferences were conducted by the Division at the Canadian Emergency Measures College, Arnprior. "Public Health Planning and Operations; EHS Health Operations; Unit Directors; Nurse Educators; EHS Pharmacists Orientation; Casualty Simulation Instructors; EHS Federal/Provincial Directors Conference; EHS Nursing Conference; EHS Supplies Officers Conference."

The fifth Emergency Health Services Advisory Committee Meeting was held in the Brooke Claxton Building in December, 1966.

The officers of the Division undertook a large number of lecture assignments to undergraduate and post-graduate professional groups.

#### OPERATIONAL PLANNING PROGRAM

Continued assistance was given to extend re-entry and casualty care planning to provide mutual support between provinces and with the United States.

Work is continuing on the development of a system for rapid damage analysis and receipt of information on remaining resources.

#### RESOURCES ANALYSIS PROGRAM

Detailed surveys of all existing health resources in Canada continue to be undertaken to provide up-to-date information on our resources in health manpower, health supplies and health installations.

A survey of sutures at the manufacturing level was completed during this period, and the survey of pharmaceuticals at the wholesale level is nearing completion. A study of hospitals and bed capacity pertaining to target cities has been completed together with the anticipated medical manpower potential.

Preliminary work has been started on surveys of syringes and surgical instruments.

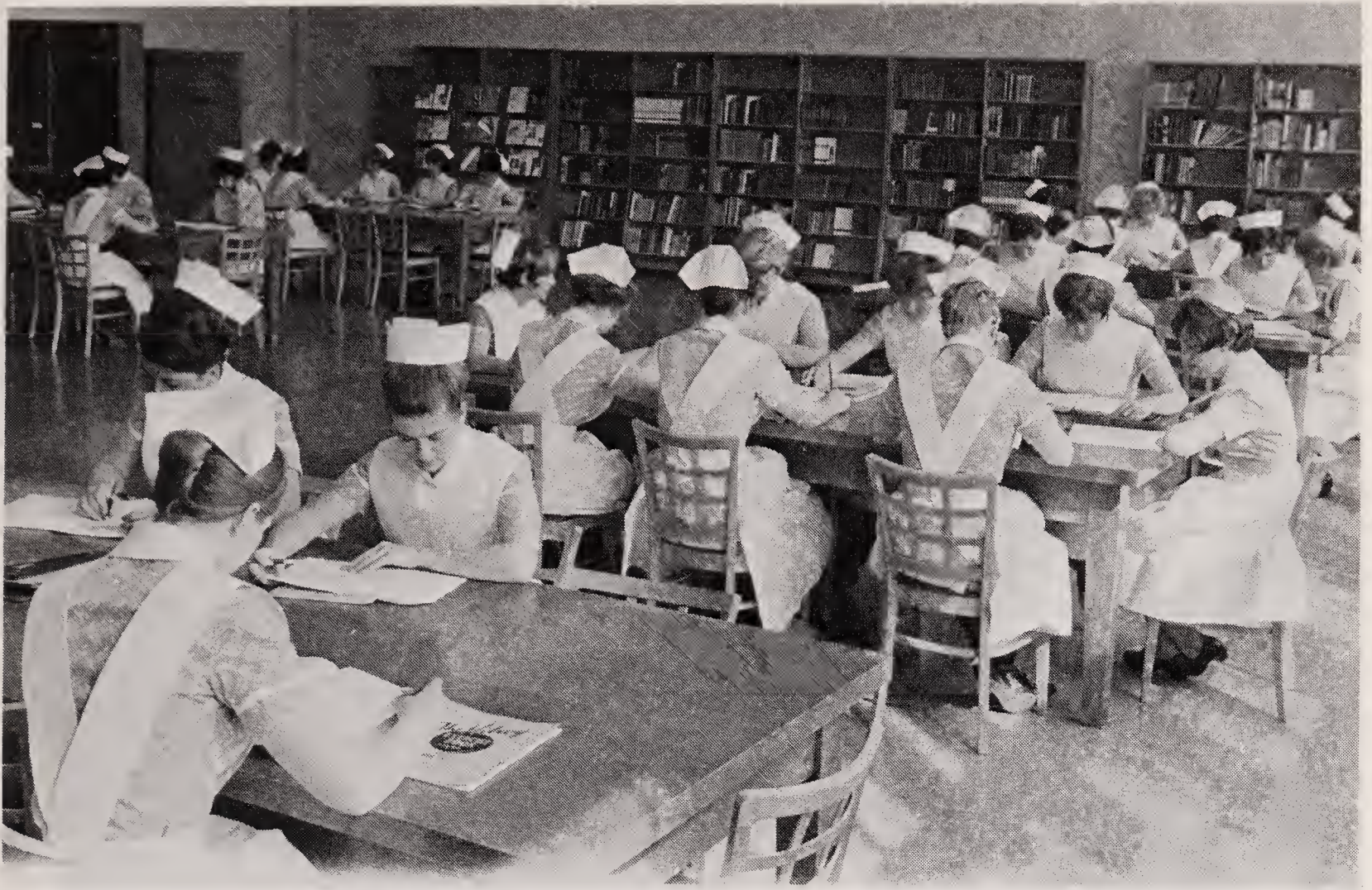
#### HEALTH SUPPLIES STOCKPILE PROGRAM

There was some delay in the packaging program because of the move of the Ottawa Depot from Plouffe Park to 1481 Michael Street. In addition a regional depot was opened in Shawinigan and stores were moved into it, mostly from the Ottawa Depot.

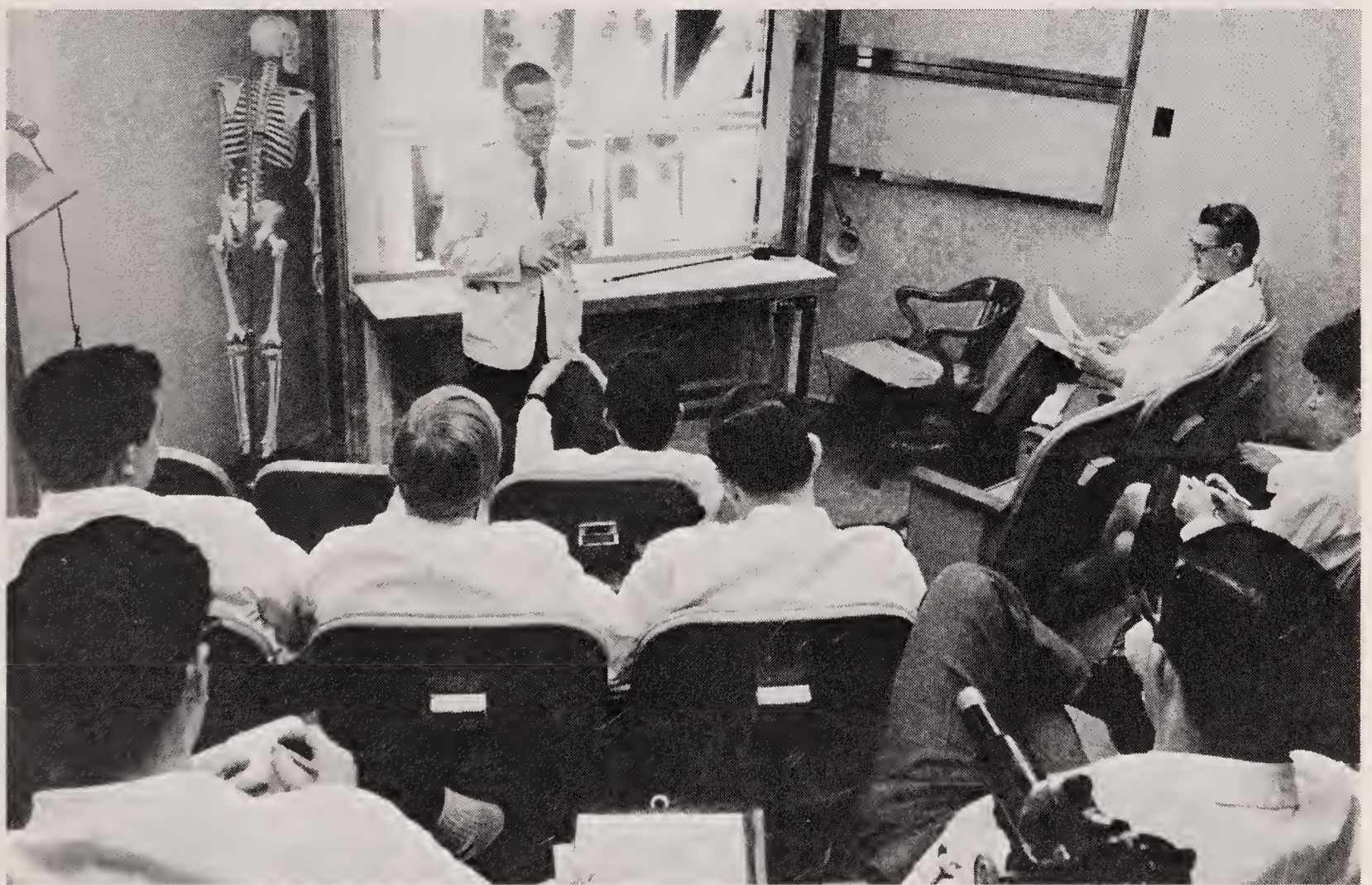
There has been an increase in the release of emergency medical units to the provinces and this phase of planning should further increase as a result of the new financial support by federal funds to the provinces.

In co-operation with the External Aid office of the Department of External Affairs, ten emergency hospitals were packed and shipped to the government of South Vietnam. The replacement of these stores in the stockpile program was a major activity in the procurement section.





Assistance provided by the Health Resources Fund helps to defray costs of building health training facilities such as the nurses library (above) and the class room (below) in which young medical students are taught.







Health Facilities Design officers examine plans for a proposed new building.



## HEALTH INSURANCE AND RESOURCES

The newly established Health Insurance and Resources Branch to which reference was made in the Annual Report last year, was further consolidated during the course of the year under review. New directorates of Medical Care and Health Resources were set up. The former Hospital Insurance unit and the former Health Grants unit were converted to separate directorates. In addition, the former Hospital Design unit was established as the Health Facilities Design Division. Directors and additional staff were appointed to the new directorates and procedures were inaugurated to ensure the integration of the Branch components under the office of the Director General.

The Director General's office was particularly concerned with the establishment of the new Branch, including the appointment of senior personnel, and also with the duties stemming from the heavy legislative program in connection with the Health Resources Fund Act and the Medical Care Act, both of which were passed by Parliament during the period under review. The Director General's office was also concerned with the Canada Assistance Plan which was passed during the year, insofar as health services are concerned.

In addition to the activities relating directly to these statutes, consultations with the provinces involved the Director General in a variety of federal-provincial meetings, including conferences at both policy and technical levels.

### Hospital Insurance and Diagnostic Services

Federal contributions to the provinces pursuant to the Agreements under the Hospital Insurance and Diagnostic Services Act were made in the amount of \$397,390,383. As mentioned in previous Reports, Quebec has received a tax abatement, in lieu of contributions, for costs incurred since 1964, having concluded an Agreement under the Established Programs (Interim Arrangements) Act. If direct contributions had been made to Quebec for costs incurred during the fiscal year under review, an amount of approximately \$166 million would have been paid with respect to insured services.

A new element in coverage was introduced by the establishment of the Hospital Insurance Supplementary Fund, to which all governments contributed. This fund was established in order to fill a gap in coverage for persons who, through no fault of their own but rather because of the variations in provincial methods of administration, find themselves without hospital insurance coverage. For the most part, these are Canadian residents who, in differing circumstances, change their place of residence but are not covered by inter-governmental arrangements in this regard. The federal government on the one hand and the provinces on the other together put a sum of \$40,000 into the Supplementary Fund. Claims are met after review of all the circumstances. At the end of the year twenty-two cases were in the process of being considered; eleven cases had been rejected and three cases were accepted.

The Directorate consultants were in continual demand during the course of the year under review, and carried out a variety of assignments at the request of provincial governments. As a special assignment, the Consultant in Hospital Nursing was invited by the World Health Organization to act as a consultant for a nursing seminar for senior nurses from member countries associated with the Eastern Mediterranean Regional Office, convened in Tehran in the autumn of 1966. In addition, the Hospital Services Study Unit, which is an integral part of the Directorate, initiated a number of research projects at the request of some of the provinces and were responsible for the co-ordination of other research projects being carried out by the provinces themselves and by other organizations.

The Advisory Committee on Hospital Insurance and Diagnostic Services, which had recommended the establishment of the Hospital Insurance Supplementary Fund, held two meetings during the year. New trends affecting hospital insurance, such as new concepts of nursing education, the use of common laundries and the provision of home care programs, were discussed. The Subcommittees on Research and Quality of Care; Finance and Accounting; and Residence and Uniformity of Benefits also held meetings to deal with certain problems relating to matters of statistics, finance and residence requirements.

### Medical Care

The Medical Care Directorate was established towards the end of the year under review. The initial staff were primarily concerned in assisting with the development of provincial programmes consistent with the principles set out in the Medical Care Act, which was passed by Parliament in December 1966. At the end of the year plans were underway for the appointment of additional consultation, evaluation and study officers.

A Federal-Provincial Technical Conference on Medical Care was held in Ottawa in February 1967 to clarify certain matters arising from the legislation and to prepare for a federal-provincial policy meeting of Ministers of Health which was held subsequently.

The federal Medical Care Act will come into operation not later than July 1st, 1968. Meanwhile, plans are being considered for studies and other methods designed to assist the governments in the assessment of programs to ensure the maintenance of high standards of medical care.

### Health Resources

The Health Resources Fund Act was passed by Parliament in July 1966. This statute makes provision for a fund of \$500 million, from which the federal government is empowered to make contributions to the provinces towards the capital costs of establishing health training and research facilities. The Act also makes provision for the establishment of a Health Resources Advisory Committee to advise the Minister of National Health and Welfare on all aspects of the Health Resources program, including the approval of provincial programs.



The Advisory Committee was set up and convened in October 1966 with a membership consisting of an appointee from each province, the Deputy Minister of National Health acting as the Chairman. At this meeting, approval in principle was given to provincial preliminary five year programs which facilitated the early operation of the financial provisions of the Fund. At the same time, the Advisory Committee approved all procedures relating to the times and manner of payment of contributions, subsequently passed in the form of Regulations to the Act. Agreement was also reached by the Committee on certain definitions so as to ensure that there would be a uniformity of interpretation.

The Advisory Committee also considered the establishment of subcommittees, to which it is planned to invite membership from national professional associations and agencies. In December 1966, a Technical Committee Meeting was held of federal and provincial officers concerned with the administration of procedures pursuant to the implementation of the legislation. Agreement was reached on procedures for project approval and payment of contributions.

The new Director took up his appointment on January 1st, 1967, and, at the end of the year under review, plans were well advanced for filling another senior position in the directorate.

Although the Health Resources Directorate was in operation for only a short period during the year under review, it was possible to approve a number of important projects amounting to approximately \$15 million, and to make payments in this regard to the extent of nearly \$5 million.

#### Health Grants

The Health Grants Directorate continued to administer the National Health Grants program without any major changes being inaugurated during the course of the year under review. A close relationship was established with the new Health Resources Directorate in order to ensure co-ordination of administration in connection with projects in which federal financial assistance was sought both through the newly established Health Resources Fund, where teaching or research was concerned, and the Hospital Construction Grant where treatment services were concerned.

There was maintained a continuing close working relationship with the various consultants in the Department in connection with the assessment of health grant projects and programs. As in other years also, meetings were held with provincial representatives to discuss provincial programs and projects insofar as these relate to the National Health Grants program.

The Health Grants have been contributing to the expansion and development of local health services in municipal health departments, health units and health regions; to the training and employment of many categories of health workers; to the control of tuberculosis, poliomyelitis, venereal and other communicable diseases; to the early detection and treatment of cancer; to the provision of more and better community detection and treatment facilities for mental illnesses; to increased emphasis on

programs to improve health services for mothers and children; expanded plans for the rehabilitation of the disabled; and to a notable emphasis on research designed to explore problem areas and to provide new knowledge for future developments.

The continuing needs for more hospital facilities and for the renovation of older hospital buildings placed a heavy demand on funds available to some provinces under the Hospital Construction Grant, particularly Ontario, Nova Scotia and Alberta.

The provinces and territories in 1966-67 committed approximately 99% of the funds available under the general health grants and 74% of the amount available for hospital construction. As in the previous year, although the money was available, continuing shortages of skilled personnel prevented some approved projects from being started and inhibited others from being fully carried out according to plan.

The grants continued to assist with 50% of the cost of vaccines against poliomyelitis. In two provinces, support was given for the purchase of the new vaccine against measles.

Eleven new home care projects received grant assistance this year, bringing the total being supported to 26. In the area of health training, new trends were encouraged with grants assistance for the development of a family practice residency and teaching unit and for the use of television in medical education.

The Health Grants Administration was charged with a new function in connection with the administration of the programme of direct grants to health organizations and agencies.

#### Health Facilities Design

The Division continued to broaden its participation in programs relating to the planning and constructing of hospitals; health institutions; teaching and medical research institutions. An active program of providing consultations and advisory services to federal, provincial and territorial hospital authorities, as well as to private consulting architects and engineers, was carried out. Approximately 70 consultations were given both in the Department and in the field.

A National Seminar on Hospital Construction Costs was organized by the Division at the request of the Advisory Committee on Hospital Insurance and Diagnostic Services. The purpose of the seminar was to provide a forum for the exchange of precise and up-to-date information on problems relating to the escalation of construction costs. It was attended by representatives of the federal and provincial governments as well as interested non-governmental associations and institutions. As a direct result of this seminar, it was agreed that a central registry of hospital construction costs would be set up.



A course in the Environmental Planning of Hospitals was also inaugurated by the Division. The course provided a multi-discipline faculty to give training in the medical bacteriological, architectural and engineering aspects of hospital building design insofar as these related to technological developments in asepsis.

The Division continued its work on the series of new publications on the Canadian Building Standards and Guide Material for Hospitals and Health Facilities. It also played a role in the production of a training film on the safe use of medical oxygen in hospitals which was sponsored by four federal departments. This pilot project is expected to be finished in the coming year.

The Division continued to review and study the construction and renovation projects for the Health Grants Directorate in connection with projects submitted for Hospital Construction Grants; and for the Health Resources Directorate in connection with projects submitted for contributions from the Health Resources Fund.

TABLE 10

## PAYMENTS BY CANADA UNDER HOSPITAL INSURANCE AND DIAGNOSTIC SERVICES ACT

| PROV.  | 1958-59       | 1959-60        | 1960-61        | 1961-62        | 1962-63        | 1963-64        | 1964-65        | 1965-66        | 1966-67        | TOTAL          |
|--------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|        | \$            | \$             | \$             | \$             | \$             | \$             | \$             | \$             | \$             | \$             |
| Nfld.  | 2,857,886.84  | 4,707,692.94   | 5,094,934.21   | 6,258,287.26   | 7,472,463.28   | 8,724,909.88   | 9,623,951.21   | 11,649,657.78  | 13,051,014.23  | 69,440,797.    |
| P.E.I. | -             | 447,338.27     | 1,010,806.54   | 1,381,894.39   | 1,673,681.11   | 1,922,524.26   | 2,102,585.78   | 2,436,076.68   | 2,732,005.91   | 13,706,912.    |
| N.S.   | 1,572,782.64  | 8,162,540.78   | 9,595,387.52   | 11,872,932.01  | 13,519,974.70  | 15,174,842.90  | 15,902,172.05  | 18,078,038.58  | 20,513,638.61  | 114,392,309.   |
| N.B.   | -             | 4,575,374.90   | 7,914,412.71   | 9,546,774.26   | 10,894,711.87  | 12,611,337.91  | 13,750,895.84  | 14,919,440.31  | 16,678,359.95  | 90,891,307.    |
| Que.   | -             | -              | 13,936,740.72  | 73,022,517.78  | 88,713,635.41  | 113,848,887.58 | 95,998,751.05  | 5,299,733.76   | 4,029,615.29   | 394,849,881.   |
| Ont.   | 13,140,213.12 | 71,892,833.66  | 84,484,271.86  | 104,498,880.55 | 122,103,382.61 | 136,039,776.87 | 151,477,498.15 | 171,899,251.27 | 194,692,978.40 | 1,050,229,086. |
| Man.   | 7,148,534.97  | 11,324,466.35  | 13,048,916.19  | 15,245,924.23  | 17,348,934.08  | 19,664,963.78  | 20,947,876.73  | 23,131,484.98  | 26,198,959.56  | 154,060,060.   |
| Sask.  | 8,430,441.93  | 13,378,379.43  | 14,453,463.99  | 15,953,810.19  | 18,278,458.50  | 21,312,084.05  | 23,526,106.20  | 25,868,645.55  | 28,598,031.35  | 169,799,421.   |
| Alta.  | 8,774,575.68  | 15,698,727.86  | 16,905,597.57  | 19,730,547.07  | 25,784,973.30  | 28,310,623.43  | 31,447,963.95  | 36,859,944.96  | 41,942,604.55  | 225,455,558.   |
| B.C.   | 12,784,038.88 | 20,406,091.56  | 22,493,438.52  | 25,697,550.94  | 30,049,147.43  | 33,687,396.64  | 36,057,502.19  | 40,545,529.34  | 47,821,288.72  | 269,541,984.   |
| Yukon  | -             | -              | 168,683.75     | 296,036.35     | 310,267.36     | 349,443.34     | 307,577.82     | 356,797.56     | 364,203.56     | 2,153,009.     |
| N.W.T. | -             | -              | 261,849.89     | 377,941.52     | 523,148.02     | 597,444.71     | 579,608.16     | 721,748.44     | 767,682.75     | 3,829,423.     |
| CANADA | 54,708,474.06 | 150,593,445.75 | 189,368,503.47 | 283,883,096.55 | 336,672,777.67 | 392,244,235.35 | 401,722,489.13 | 351,766,349.21 | 397,390,382.88 | 2,558,349,754. |



TABLE 11

## EXPENDITURES UNDER THE HEALTH GRANTS 1966-67

| Province | Hospital Construction Grants | General Health Grants |               |                      |                        |                          |                |                                      |                           |              | Total Health Grants |
|----------|------------------------------|-----------------------|---------------|----------------------|------------------------|--------------------------|----------------|--------------------------------------|---------------------------|--------------|---------------------|
|          |                              | Professional Training | Mental Health | Tuberculosis Control | Public Health Research | General Public Health(a) | Cancer Control | Medical Rehab. and Crippled Children | Child and Maternal Health | Total        |                     |
| Nfld.    | 878,935                      | 116,835               | 156,334       | 136,139              | 52,210                 | 409,078                  | 3,374          | 129,679                              | 55,628                    | 1,059,277    | 1,938,212           |
| P.E.I.   | 197,730                      | 19,819                | 114,735       | 19,163               | 20,938                 | 198,572                  | 16,600         | 8,700                                | 7,950                     | 406,477      | 604,207             |
| N.S.     | 354,373                      | 168,715               | 366,444       | 79,290               | 226,327                | 667,629                  | 31,965         | 89,944                               | 63,300                    | 1,693,614    | 2,047,987           |
| N.B.     | 373,512                      | 62,407                | 309,060       | 67,956               | 31,600                 | 586,988                  | 67,936         | 98,554                               | 74,571                    | 1,299,072    | 1,672,584           |
| Que.     | 3,451,130                    | -                     | -             | -                    | 872,989                | 138,179                  | -              | -                                    | 34,113                    | 1,045,281(b) | 4,496,411           |
| Ont.     | 6,962,213                    | 613,175               | 2,779,469     | 874,688              | 1,524,484              | 4,806,910                | 582,812        | 939,446                              | 263,956                   | 12,384,940   | 19,347,153          |
| Man.     | 637,548                      | 78,978                | 456,930       | 90,282               | 711,228                | 880,783                  | -              | 146,189                              | 79,365                    | 2,443,755    | 3,081,303           |
| Sask.    | 1,033,575                    | 86,834                | 362,792       | 81,395               | 201,072                | 786,764                  | 98,438         | 138,996                              | 79,452                    | 1,835,743    | 2,869,318           |
| Alta.    | 1,513,240                    | 166,004               | 653,318       | 118,620              | 141,888                | 1,234,222                | 144,935        | 61,732                               | 144,558                   | 2,665,277    | 4,178,517           |
| B.C.     | 979,178                      | 135,183               | 793,764       | 158,148              | 453,815                | 1,622,413                | 176,367        | 263,655                              | 58,029                    | 3,661,374    | 4,640,552           |
| N.W.T.   | 92,510                       | -                     | -             | -                    | 6,352                  | 89,245                   | -              | -                                    | -                         | 95,597       | 188,107             |
| Yukon    | -                            | -                     | 37,431        | 16,116               | -                      | -                        | -              | -                                    | -                         | 53,547       | 53,547              |
| TOTAL    | 16,473,944                   | 1,447,950             | 6,030,277     | 1,641,797            | 4,242,903              | 11,420,783               | 1,122,427      | 1,876,895                            | 860,922                   | 28,643,954   | 45,117,898          |

(a) Out of the special allocation of \$300,000, the following amount was expended: Quebec - \$115,308; Ontario - \$94,318.

(b) Total excludes an estimated amount of \$9,600,000 which may represent Quebec's entitlement under the Established Programs (Interim Arrangements) Act.



The new Charles Camsell Hospital, in Edmonton, Alberta, is the pride of the Medical Services Directorate's many medical facilities.





A young Indian child is about to be flown to hospital following an emergency radio message from Medical Services nursing station in Canada's Northland.





The Department of Transport ship, the C. D. Howe, serves, among other things, as transportation to Department of National Health and Welfare personnel on periodic health missions to the North. Here crew and staff of the ship gather near the stern during a quiet part of the voyage.



## MEDICAL SERVICES

The Medical Services Branch of the Department of National Health and Welfare comprises a constellation of service programs more concerned with service to individuals and regulatory control of the hygiene of certain public services, such as common carriers, than with research or advisory services. These programs now include;

- (a) quarantine services,
- (b) immigration medical services,
- (c) medical services to the Canadian Coast Guard Service,
- (d) medical services to sick mariners,
- (e) health services for indigent, registered Indians,
- (f) health services in the Northern Territories,
- (g) health services to Civil Servants,
- (h) health examination and advisory services to the Department of Transport.

### Administrative Organization

Although basically the same in principle as in previous years, 1966 saw considerable modification in the administrative organization. The Director General, together with his staff of advisory officers, still promulgates the guiding policies and principles and defends the estimates for financing operations but there has been a further decentralization of direct control of operations onto Regional Directors and other local directors and some internal rearrangement of the regional organization, the first steps in an ongoing program of reorganization which is continuing in 1967. A new Northern Region came into being on 1st April 1966, comprising both the Yukon and Northwest Territories geographically, formerly serviced by three Regional Directors based on Ottawa, Winnipeg and Edmonton respectively. Regional control of health services to all residents in the vast Canadian Arctic regions is now delegated to one Regional Director based on Edmonton, Alberta, who is concerned solely with the frequently unique problems of health and medical services in the far North. There was also some modification of the organization of some of the subordinate units of administration whereby certain Zones were redesignated "Areas", the distinction being that, whereas a Zone Office has its own supportive clerical and financial administrative staff, an Area Office relies for such supportive services on the Regional Office. The Area Director, a senior medical officer, is concerned only with directing the more professional aspects of the field programs. This was intended to effect some streamlining of administrative financial control at Regional level and to free the professional staff to concentrate on improving their local health programs. These steps were taken in implementation of the principles of reorganization



A Civil Service Health Nursing Consultant applies a bandage to the hand of a Department employee injured in a fall



recommended in the Glassco Report and further developments are planned. As a result of this reorganization, there were seven Regional Directors onto whom responsibility for local implementation of Medical Services' policies were passed in 1966. The seven Regions administered by them respectively were:

- (a) European Region, based on London, England,
- (b) Eastern Region, based on Ottawa,
- (c) Central Region, based on Winnipeg,
- (d) Saskatchewan Region, based on Regina,
- (e) Alberta Region, based on Edmonton,
- (f) Northern Region, based on a separate office in Edmonton,
- (g) Pacific Region, based on Vancouver.

In a further development completed at the end of the year, the huge Eastern Region, which comprised the Atlantic provinces, the province of Quebec and the province of Ontario, became three Regions, the Atlantic Region, based on Halifax, the Quebec Region, based on Montreal and the Ontario Region, based on Ottawa. At the same time plans have been prepared to amalgamate the three central Regions, comprising geographically the province of Manitoba, Saskatchewan and Alberta, into one Prairie Region with the Regional Office at Edmonton. There will thus still be seven Medical Services Regional Administrative Offices but the Regions will be more homogenous with particular problems specific to each.

#### Service Units

In addition to the various administrative offices, services are provided through departmentally owned and operated hospitals, nursing stations, health centres, health stations and a variety of out-patient clinics. The number of these varies from year to year as old units become obsolete and new units are developed. For example, it was possible to phase out two more obsolete hospitals during the year because of the development of much better communal hospital facilities in the areas. During 1966, Medical Services operated sixteen hospitals, thirty six major out-patient clinics, forty six nursing stations, eighty three health centres, fifty two miscellaneous health stations and, outside of Ottawa at Halifax, Point Edward, Montreal and Toronto, nine Civil Service Health Clinics. All Medical Services units are fully equipped with efficient modern medical equipment adequate to serve the purposes each is designed to meet. Nursing stations, for example, which are essentially small "cottage hospitals" used mainly for maternity work and emergency treatment and permanently staffed by nurses with physicians services on call, are equipped with X-ray machines, side room laboratory facilities and delivery facilities, frequently, where necessary, radio telephones. They are mainly located in sparsely

populated northern areas where it is uneconomical to establish a hospital. Most Health Centres are also equipped with X-ray machines, mainly for chest X-ray work. Considerable use is also made of portable units, X-ray, dental and other clinical facilities. Services must frequently be brought periodically to some more remote areas where it is quite impractical to establish a permanent unit.

### Service Policies

Health being primarily a matter under provincial jurisdiction, it has always been the policy of the Central Government medical services to employ where possible the services of any local physician, medical or health facility prepared to co-operate, usually on an agreed financial basis. Direct services are given and units built only where no other arrangements can be made. Even in the North, where Medical Services acts for the two Territorial Governments in the capacity of their local "Health Departments", hospital and other facilities are usually provided on a cost sharing basis with the local communities and not solely by the federal Medical Services. On this basis some excellent modern general hospitals have been built in the major centres of population in the North and local residents take a very practical pride and interest in their hospital.

The services of travelling clinics organized by provincial health services to serve rural areas are routinely enlisted and not infrequently university faculties of medicine and specialist-professional associations offer their expert services, particularly in regard to specific problems. It is departmental policy to foster such co-operation and certain universities routinely make use of departmental facilities in the training of medical students. Close liaison has now been developed with all major schools of medicine and university schools of nursing whereby students undertake part of their undergraduate training in Medical Services hospitals and other units. In other arrangements with the provincial health departments and local provincial Health Units the work load in the area is shared equally by federal and provincial staff. As a result of this kind of co-operation, in most areas it can now be said that the native populations enjoy the benefits of the same services as are available to the general population. There are exceptions where the federal services still have to provide all services or augment what is locally available but this is increasingly becoming the exception rather than the rule.

During the year new financial arrangements were made with various provincial branches of the professional associations for the remuneration of private physicians serving Indians. The introduction of universal medical care insurance will ultimately accelerate the development of this integration of health services for our "First Canadians".

### Construction Program

The construction of the new hospital to replace the old Charles Camsell Hospital at Edmonton continued throughout the year. This new large modern and fully equipped general hospital was to be ready for occupancy early in the summer of 1967. The hospital at Moose Factory was extended and



reroofed during the year and minor improvements were made to the hospitals at North Battleford and Norway House.

As regards Nursing Stations, two new standard type stations were built at Fort Franklin and Aklavik while an innovation was the purchase of portable type complete units. Each Nursing Station consists of three portable units which can be bolted together, completely wired for power and with heating and plumbing built in and ready for use. Such Nursing Stations were erected at Pond Inlet, Igloolik, and Foxe Lake.

### Changes in Personnel Management

In May 1966, the Personnel Administration Directorate made available to the Medical Services Branch the nucleus of its own personnel division. This transfer was the first of its kind in the Department whereby a personnel division was created and transferred to work within a branch.

Plans have been developed during the early part of 1967 to decentralize, wherever possible and practical, the personnel function to certain regions. Recruitment for these very necessary personnel administrators is underway but it is most difficult to find suitably trained and experienced personnel who will be able to carry out their functions in connection with the staffing, classification and staff relations responsibilities which will be theirs to administer.

In addition to the very onerous responsibilities which this nucleus of a personnel division is bearing in the normal staffing and classification functions, it is also faced with the extensive classification revision program undertaken by the Government. With the advent of collective bargaining, considerable work is necessary in this regard as the Medical Services Branch has a staff of approximately 3600, most of which are in the various regions spread across the country. More than half of the staff is in the Professional and Scientific Categories with the remainder divided between the other occupational categories and groups.

### Dental Services

The dental services program of Medical Services Branch is involved in three of the Branch's major activities, namely: Indian Health Services, Northern Health Services, Sick Mariners Service. The program objective is the improvement and preservation of the dental health of those groups whose health care, by legislation or custom, has been assigned to the Medical Services Branch of the Department of National Health and Welfare. Each of the three previously mentioned major activities may be considered to have its own subordinate objective, namely: the achievement and maintenance of a standard of dental health for Indian and Eskimo groups comparable with provincial standards within each region; the achievement of a standard of dental health for residents of the Territories comparable with that of the remainder of the population; and for the Sick Mariners emergency diagnostic and treatment services, the relief of pain and infection of dental origin.



The Medical Services Branch program arranges federal support as regards all of the above, under definite terms and conditions. For instance, Indians and Eskimos who are able to do so are expected to pay for professional dental and medical attention in the ordinary way; they are no more entitled to free care than any other Canadian. Essential and basic dental care and special treatment for selected cases, and also dental health education, are provided by departmental Dental Officers and the use of departmental facilities, as well as through arrangements with private dental practitioners. The Public Health Dental Officer, of the Dental Health Division, forms part of Medical Services' advisory staff at head office and has technical supervision over the dental program. Regional Dental Officers are responsible to Regional Directors for the planning and administration of dental health programs to be executed in the zones and areas of each region.

Medical Services have static dental clinics in hospitals such as the Charles Camsell Hospital, Norway House, Sioux Lookout and Frobisher Bay, where Zone Dental Officers are based and operate, and from which they travel to remote and sparsely settled areas in the field. For this last purpose, portable dental equipment is used. As a result of previous recommendations, some movable (though less portable) equipment, as well as equipment released by the Royal Canadian Dental Corps, has been purchased and set up in some residential schools where the number of children is sufficient and space is available.

The improvement of the dental program's working conditions has recently been very remarkable. For instance, in one school where a year ago a Dental Officer could be seen working in a small room without running water, three dental chairs now stand and allow dental hygiene students, on a rotation basis, to get some idea as to how they can, in the field, accomplish - under the supervision of a Dental Officer - some of the work for which they have been trained. Posters are presently advertising Dental Hygiene positions.

Improved working equipment and conditions increase the efficiency and productivity of Dental Officers and attract more dentists willing to practice, for short periods, for Medical Services' dental program. A major cause of complaint concerning the dental services program of Medical Services Branch has now been eliminated. A revised I.H.S. Schedule has been approved and published for the convenience of those dental practitioners who render professional services to Canada's Indians and Eskimos. It is now effective in all parts of Canada, with the exception of Alberta, where agreements were reached involving the use of the Provincial Schedule at a negotiated reduced percentage, and Northern Region where, because of special conditions, other agreements were required.

Arrangements for the purchase of services from private dental practitioners, by Medical Services, on a fee-for-service basis are becoming more and more popular. During the recent review of the dental program in the Western Regions and Northwest Territories, the Public Health Dental Officer was informed that in one region services were thus purchased from over five hundred dentists. A per diem rate method of payment is employed by Medical Services to provide basic dental care (prophylaxis, necessary fillings, and extractions) in some residential schools. Under special



circumstances, Medical Services also assisted in the establishment of at least three private dental practitioners in the Northern Region by providing space, equipment, and facilities on a rental basis to qualified dentists who can thus, with very little overhead expense, carry on a reasonably profitable practice in an office where equipment can be favourably compared to that of many dental offices in any of the smaller Canadian communities.

#### Civil Service Health

Three broad classes of service are given under this program; a basic advisory and consultant service to all government departments, several crown companies, corporations and commissions on employee health and welfare matters; a comprehensive nursing counsellor service to the employees themselves and diagnostic and emergency medical services to over forty thousand civil servants in the Ottawa area and upon departmental request elsewhere. The basic criteria laid down for establishing civil service health units require the concentration of a minimum of 750 to 1000 public servants in one or more federal government buildings within reasonable walking distance, suitable space and adequate professional personnel with essential referral facilities for treatment purposes as treatment of ailments, other than emergency treatment, is not included in the program. Major cities with federal employee concentrations meeting the above criteria include Vancouver, Edmonton, Calgary, Winnipeg, Toronto, Montreal and Halifax. Plans are well advanced for developing health unit services in these areas. Eleven such units have now been established in Victoria, Vancouver, Edmonton, Toronto, Montreal and Halifax and in certain Department of National Defence stations.

#### Medical Centre (Ottawa) Services

The highlight of the year under review was the move early in October of the Headquarters and Medical Centre of the Bureau from its old location in No. 3 Temporary Building to new, modern, spacious accommodation in the Civil Service Co-operative Credit Society Building, 402 Albert Street. Unquestionably these new well-appointed quarters will contribute greatly to the extension and improvement of services generally.

Health unit referrals, pre-employment medical examinations where assessment of physical or mental fitness is required, obligatory or statutory examinations and psychological assessments required by statute under the Public Service Superannuation Act, the Foreign Service Regulations and the Isolated Posts Regulations and periodic voluntary examinations at departmental request for special employee groups once again have made up the bulk of the clinical services conducted at the Medical Centre. The special employee groups include those employees assigned each year to summer field work, those engaged in especially hazardous jobs such as exposure to radio-active materials, pesticides and other toxic agents, scuba diving, hospital employees, selected groups of senior executive personnel and finally, special eye examinations for employees whose duties require optimum visual acuity and depth perception. Here we are fortunate in having the ophthalmological consultant services of the Chief of the Medical Rehabilitation Division, Health Services Branch, available for both major programs within the Ottawa Bureau.



Almost one third of the total available medical officer time is required to meet our commitment to foreign service personnel and their dependents. This includes not only the clinical and advisory services afforded the Departments of External Affairs and Trade and Commerce, but as well the planning of medical arrangements for assignees and their dependents proceeding abroad under several government aid programs administered by the External Aid Office, the Canadian University Service Overseas (CUSO), and the Company of Young Canadians (CYC). Hardship ratings were assigned to two new missions during the year, namely Tunis and Nairobi, based on information contained in Post Reports from the U.K. and the U.S. respectively.

The psychiatrist continues to liaise with the nursing counsellor staff, holds formal lectures and group discussions with appropriate departmental personnel, all with a view to increasing their awareness of early emotional and psychiatric difficulties. He serves on the Advisory Committee of the Ottawa Branch of the Alcoholism and Drug Addiction Research Foundation of Ontario, thus giving leadership and direction to the well established program of combatting alcoholism in the Federal Civil Service, both within and outside Ottawa. Early recognition, treatment and rehabilitation of the problem drinker are the major goals of this program and each year has seen an appreciable number of employees restored to useful and effective work.

The psychologist, as a member of the clinical team working most closely with the psychiatrist, conducted a total of 988 interviews, forty per cent of which were held in health units. This arrangement saves employee time, facilitates closer rapport with nursing counsellors and enables the psychologist to meet and discuss problems with the nursing counsellors and departmental officers concerned. There has been an increasing demand by personnel officers and administrators for appraisal of personality and emotional problems in the so-called normal employees who have no significant psychiatric symptoms but are reacting adversely to frustration and stress related to their jobs.

Immunizations totalling 7646 varying in type were administered to 2686 individuals, mainly foreign service personnel and dependents posted to overseas stations or to isolated regions. This total represents a 20% decrease from that of the previous year, accounted for largely by a sizeable reduction in yellow fever vaccinations provided for RCAF Air Transport Command. Special arrangements have been made for the immunization of Department of Transport trainees attending Air Services Classes at Uplands.

With the move of the Medical Centre to its new quarters the Medical Review Section combining the review and assessment functions, common to both major programs, has been able to operate most efficiently. The support services of both the Civil Service Health and Civil Aviation Medicine activities have been integrated to achieve administrative economy. It has also provided the support staff with more challenging and varied work. Insofar as possible one medical officer continues to be responsible for the review and assessment functions related to Civil Service Health. The work of this Section continues to reflect the ever increasing medical advisory services being provided to federal departments, boards and agencies. During the year this Section reviewed and processed 128,674 Physician's Certificates of Disability for



Duty and 14,302 Physical Examination Record Forms requiring issue of Medical Interpretation Forms. Some 1,082 medical examinations for physical assessment of employees required by statute or requested by employing departments in the interests of employee health or suitable job placement were arranged for outside Ottawa. These figures are in excess of those reported the previous year and necessitated an overall increase in the volume of correspondence conducted by this Section.

Last year, a survey of existing health services and first aid facilities at major airports in Canada was commenced. Much useful data was assembled and early in the year a report containing suggested minimum standards for the provision of essential medical emergency services at these airports was completed.

#### Health Unit (Counselling) Services

There were 26 full-time and 4 part-time health units operating within the Ottawa area during the year. Two new units were opened without increase in establishment. A one-nurse health unit was opened in June, 1966, to serve the approximately 800 civilian employees at the R. C. M. P. Headquarters Building, Alta Vista Drive. A second one-nurse health unit was opened in October, 1966, in the Sir Guy Carleton Building, 161 Laurier Avenue West, to serve 400 employees of the Department of Forestry located in that building as well as some 3,000 others in scattered groups largely of the Department of Industry and Department of Defence Production. A small one-nurse unit in the Metcalfe Building was closed and employees referred to the new unit in the Sir Guy Carleton Building. Projected plans were completed for the opening of a new one-nurse unit in the Sir John Carling Building, Experimental Farm, in the Spring of 1967.

As in former years an orientation program was arranged for each of the eight new nursing counsellors taken on strength. Medical Services participated in the planning and execution of a new field work project for public health nursing students at the University of Ottawa. The major change incorporates field training on a one day per week basis during the entire course rather than the two-week block period as in previous years. The plan provides for each student to spend one day in a generalized program such as the City Health Department, one day with the Victorian Order, and one day in a Civil Service Health Unit. The Chief Nursing Officer participated in a series of lectures leading up to this major change in the field work program.

Finally, a new program for staff evaluation was developed and introduced. The Orientation Progress Report has formed the basis of the planned orientation for each of the eight new nursing counsellors. It appears to be a very useful tool for both the immediate supervisor and the new employee. Employee Progress Reports have been completed on the majority of the nursing counsellor staff. Participation in this pilot project has proved a stimulating exercise for all concerned. It is believed that his new program results in a more thoughtful approach with more objective results than previously used methods.



## Civil Aviation Medicine

The Civil Aviation Medicine activity is responsible for advising the Department of Transport on the application of the Physical Standards for Civil Aviation Personnel Licensing. This function embraces the maintenance of a nation wide medical examiner service provided by formally appointed Civil Aviation Medical Examiners, the operation of six Regional Offices closely integrated within the framework of the Department of Transport's Regional administrations, and a Headquarters' authority comprised of professional and clerical personnel within the Ottawa Bureau.

During the year 31,278 medical examinations on civil aviation personnel were completed and assessed, up 5,158 from the previous year, an increase of 20%. Electrocardiograms, a special licencing requirement for the senior piloting licences, numbered 4,860 compared with 3,693 for the previous year, a 32% increase. 20,627 licence holders were examined in 1966. Of this group, 12 Airline Transport, 18 Commercial and 72 Private Pilots, as well as 8 Air Traffic Controllers were downgraded in medical profile and lost their licences. Two of the Airline Transport and 3 of the Commercial Pilots retained Private Pilot privileges. Two hundred and sixteen Private Pilots were downgraded in medical profile but retained their licences. Of the 10,651 candidates seeking the initial issue of an aviation licence and examined during the year, 187 were unsuccessful for various medical reasons, chief among which were disorders of the cardiovascular system including hypertension, psychiatric and nervous disorders, visual problems, peptic ulcer, diabetes and other metabolic diseases. One hundred and eighty five of them were for the Private Pilot licence, 1 for Commercial, and 1 for Air Traffic Controller licence.

The work of the aviation medical examiners provides the basis for the entire program. Their examinations are screened and assessed by Regional Medical Officers to establish medical validity for the issue or renewal of aviation licences. A great deal of detailed work goes into selecting the best qualified candidate from those who have applied for an appointment with this service. Names are recommended to the Department of Transport for formal appointment by the Director of Civil Aviation. A total of 41 new names were added to the official list during the year for a year end total of 476. The administration of this medical examiner group, as to professional guidance in the application and interpretation of physical standards, and in the technique of the examination, as well as their orientation in approved departmental administrative procedures, is the responsibility of the Bureau.

The six Regional Medical Officers have been delegated a good deal of responsibility, not only in screening and assessing the medical examinations and electrocardiograms, but in providing assistance to the medical examiners in methods and procedures, giving medical advice to the Department of Transport in his Region, to aviation personnel, potential pilots and air traffic controllers, and to the many agencies and individuals, including medical specialists, who have an interest in aviation.



Procedures already established for the handling of contentious medical problems continued to be utilized. Appropriate specialists from the membership of the Regional Medical Consultant Boards were called upon, when necessary, to provide additional clinical data and expert opinion in certain problem cases. The Ottawa Bureau Medical Review Board, consisting of the Director, Medical Staff and Psychologist, continued to meet weekly to discuss and adjudicate upon difficult medical problems presented to it by the professional reviewing staff.

Contact was maintained at the international level with the Aviation Medical Adviser of the International Civil Aviation Organization, the Federal Air Surgeon of the U.S. Federal Aviation Agency, and the Australian Government's Director of Aviation Medicine. The annual meeting of the Aerospace Medicine Association in Las Vegas, the largest association of its kind in the world, was attended by the Director and also other aviation organization meetings. As well, the Australian Government was assisted in their program for the recruitment of Air Traffic Controllers within Canada.

#### Quarantine Service

The Quarantine Service is operated under the authority of the Quarantine Act and Quarantine Regulations and in accordance with the International Sanitary Regulations of the World Health Organization to which Canada subscribes without reservation since their entry into force in 1952. Its primary objective is to reduce to a minimum the hazard of entry into Canada through international traffic of the major quarantinable fever and infectious disease in general.

All arriving carriers and travellers from outside coastwise zones are inspected at the first port or airport of arrival in Canada. Full-time departmental personnel perform these functions at major ports and airports. At centres receiving a lesser volume of international traffic services are provided on a part-time basis. Quarantine officers at ports and airports are kept informed of the world-wide incidence of quarantinable disease on the basis of information received at Head Office from World Health Organization in Geneva, by daily radio broadcast and weekly written reports from officers of Medical Services abroad, from the United States Public Health Services and other sources.

In keeping with modern international trend strong emphasis is placed on the importance of immunization and preventive procedures. The amended form of International Certificate of Vaccination against Smallpox adopted by the 18th World Health Assembly was introduced into general use in Canada in the latter months of 1966. This form is supplied free of charge to the travelling public. Informational material is also regularly provided to travellers.

During the year under review no case or suspected case of major quarantinable disease was imported into Canada. A total of 7,677 ships, 12,037 aircraft and 1,488,911 travellers were inspected for quarantine purposes. A consistent annual increase in the volume of international traffic is noted.

In application of the International Sanitary Regulations a number of ports are designated as ports for rodent control inspection and fumigation of vessels and for the issuing of Deratting or Deratting Exemption Certificates.

The Quarantine Service supervises the importation and administration of yellow fever vaccine in Canada. Certificates of Vaccination against Yellow Fever are internationally recognized only if vaccination is performed at designated centres registered with the World Health Organization. There are currently 19 such centres located in major cities across Canada. A total of 12,223 vaccinations were performed during the year.

#### Sick Mariners Service

This Service operates under authority of Part V of the Canada Shipping Act. The Act provides a compulsory levy of 2¢ per net registered ton on all vessels arriving in Canadian Provinces from foreign ports and in certain instances on coasting vessels arriving from another Province. The initial payment can in no case be less than \$2.00 and the total due in any calendar year is a sum calculated at six cents per net registered ton, or the sum of \$2.00 whichever is the greater. Payment on behalf of fishing vessels of Canadian registry is voluntary but, if coverage is desired, the payment must be made before the first fishing voyage in the calendar year is undertaken.

The Sick Mariners Service is authorized to provide medical, surgical and hospital care and to supply a reasonable quantity of drugs for eligible sick mariners. Under agreements between the Federal and Provincial Governments sick mariners are not excluded from hospital insurance benefits and, consequently, hospital charges other than co-insurance, are now paid only for those seamen or fishermen who are not covered by a Provincial Hospital Insurance Plan.

Sick Mariner clinics staffed by Medical Services personnel provide treatment at Halifax and Sydney, N.S., Saint John, N.B., Quebec and Montreal, P.Q., and Vancouver and Victoria, B.C. At other ports treatment is provided by Part-Time Salary physicians or by designated port physicians retained on a fee-for-service basis. Department of Veterans Affairs hospitals are designated for the hospital treatment of sick mariners in all areas where they exist.

#### Immigration Medical Service

The various functions of the Immigration Medical Service are carried out under the authority of the Immigration Act (Sections 2, 21 and 48) and the Department of National Health and Welfare Act (Section 5). Primarily the Service is engaged in determining the medical status of persons for Canadian immigration purposes prior to, at the time of, and in certain instances following arrival in Canada. Additionally, the Service acts in an advisory capacity to the Department of Manpower and Immigration in all matters respecting the health of immigrants. Mainly in the area of co-operation with provincial departments of health and related agencies assistance is given to certain Canadian industries by examining prospective immigrants according to the employment standards of the industry concerned,



e. g., the Canadian Mining Industry. Co-operation with provincial departments of health is further extended in the area of tuberculosis and venereal disease control and close liaison is maintained with the Canadian Tuberculosis Association and the Canadian Psychiatric Association.

A secondary responsibility relates to the provision of medical care for certain classes of persons subject to Immigration authority at the time of or following arrival in Canada. Relative to this function statutory authority derives not only from the Department of National Health and Welfare Act and the Immigration Act but also in certain limited classes of persons from Orders-in-Council P.C. 1957-11/848 (indigent immigrants or persons under immigration jurisdiction or for whom the Immigration Branch feel responsible), P.C. 1862 of 24 March 1941 (certain incapacitated non-resident seamen requiring prolonged medical care and maintenance), P.C. 825 and 1960-4/126 (medical and hospital expenses and related expenses for certain Polish veterans).

### Overseas Activities

Medical examinations for immigration purposes are carried out by Canadian Medical Officers without charge to the applicant at London, Liverpool, Leeds, Glasgow, Belfast, Birmingham, Bristol, Brussels, Vienna, Copenhagen (part-time), Paris, Cologne, Hamburg, Stuttgart, Athens, Rome, Milan, The Hague, Lisbon, Berne and Hong Kong. During 1966 Canadian Medical Officers accompanied Canadian Immigration Officers to conduct examinations in France (Bordeaux, Rennes, Metz, Strasbourg), Italy (Latina) and Malta. Such Team Schemes are usually of about two weeks duration. Local physicians conduct medical examinations on a part-time basis at Departmental expense at Canadian offices in Helsinki and Munich. In Dublin and Berlin local physicians conduct examinations in their own offices but are paid for their services by the Department on a per capita basis. For organizational purposes offices in the United Kingdom and on the continent of Europe constitute the European Region of Medical Services with headquarters in London, England. The Hong Kong office reports direct to Head Office, Medical Services, Ottawa.

X-ray films of the chest are a routine requirement for all applicants over the age of 10 (those younger may be X-rayed in certain circumstances). Free X-ray services are provided where Departmental X-ray equipment is available (London, Leeds, Liverpool, Glasgow, Bristol, Belfast, Birmingham, The Hague and Paris). The Department meets the cost of chest films for immigrants on a per capita basis prepared by local radiologists in Dublin.

Roster Doctors (whose work is reviewed and supervised by the nearest Canadian office) also examine persons for Canadian immigration purposes in certain countries (United Kingdom, Northern Ireland, Eire, France, Portugal, Norway, Sweden, Finland, Switzerland, India and Pakistan) and are paid for their services by the applicants. The Roster Doctors' work in India (New Delhi, Madras, Calcutta, Bombay) and Pakistan (Karachi) is reviewed at Head Office, Medical Services, Ottawa.

The medical examinations of persons applying from countries in which Canadian Medical Officers or Roster Doctors are not available submit documentary medical evidence for assessment by Canadian Medical Officers



under the Preliminary Medical Screening System. Medical evidence in these cases is prepared at the expense of the applicant by doctors designated by officers of the Department of Manpower and Immigration or by officers of the Department of External Affairs or, where there is no Canadian Government representative, by an officer of the British Embassy or British Consular Service, and in some instances is prepared by a doctor of the applicant's own choice. Departmental medical opinions based on the review of the preliminary medical screening evidence are forwarded to the Immigration Division of the Department of Manpower and Immigration and indicate whether or not such applicants are likely to meet medical requirements on arrival at the Canadian port of entry having reference to the Immigration Act. Preliminary medical screening is conducted mainly at Head Office, Medical Services, Ottawa, where 52,751 submissions from 84 countries were processed during the year as compared to 31,163 submissions in 1965 and 13,000 cases in 1955 (when the Preliminary Medical Screening Section was established at Ottawa). In addition preliminary medical screening was conducted during the year by Canadian Medical Officers at Athens (2376 assessments), Lisbon (603 assessments), Vienna (3576 assessments), and Hong Kong (5067 assessments).

#### Activities in Canada

Medical examinations or inspections for immigration purposes are carried out at Canadian sea and air ports or at other centres throughout the country where Medical Services personnel are located.

Persons examined abroad by Canadian Medical Officers or by locally employed physicians examining in Canadian offices or by Roster Doctors are not medically examined ordinarily on arrival in Canada but do undergo medical inspection. Persons examined by Local Examiners at centres abroad not staffed by Canadian Medical Officers are examined at the time of Canadian entry on a spot check basis and all are medically inspected. Persons who have undergone preliminary medical screening are subject to medical examination on arrival at a Canadian port of entry. X-rays of the chest are prepared without charge for immigration purposes wherever Departmental X-ray facilities exist in Canada.

#### Special Services Overseas

In addition to the specific medical advisory services provided officers of Department of Manpower and Immigration overseas, Canadian Medical Officers in charge of offices act as medical advisors to the Ambassadors or other Canadian Government personnel at these posts. Furthermore, on occasion Departmental Medical Officers conduct medical examinations of Canadian personnel abroad for the Civil Service Health Division, recruits for the Canadian Forces at the request of the Joint Staff (London), and certain persons resident in the United Kingdom and Europe for the Workmen's Compensation Boards of the provinces and for the Department of Veterans Affairs. Medical liaison work is done by Canadian Medical Officers abroad as in connection with the submission of reports on the use of certain drugs to the Food and Drug Directorate, Ottawa, and the provision of weekly reports to Head Office, Medical Services, Ottawa, with respect to local health conditions in the country in which they are located. As requested Canadian Medical



Officers abroad represent Canada at meetings and conferences and make their reports available for Government use.

A Health Unit is located in the MacDonald Building, London, England, supervised as part of his regular duties by a Departmental Medical Officer and staffed by a Canadian Nurse, to provide medical services as necessary for Canadian public servants and locally employed staff. A Medical Officer of the London office is available on call 24 hours daily. During the year 706 persons received attention at the London Health Unit of which 136 were seen by a doctor. Two hundred and fifty persons were vaccinated against smallpox and 105 other immunizations were carried out. Forty-four blood specimens were obtained from Canadian Armed Forces recruits.

#### Current Workload

During 1966 a total of 320,409 examinations and re-examinations including medical assessments under the preliminary medical screening system were conducted by the Service in Canada and overseas as compared to 236,840 in 1965. The increase of 83,569 or 35.28% was occasioned by increased immigration activity in the European Region (218,189 as compared to 164,965 in 1965; an increase of 32.26%), in Asia (17,947 as compared to 13,817 in 1965; an increase of 29.89%), in respect of cases processed by the Preliminary Medical Screening Section at Ottawa (52,751 as compared to 31,163 in 1965; an increase of 69.27%), and a Medical Services Offices in Canada (31,522 as compared to 26,895 in 1965; an increase of 17.20%). The substantial increase in cases processed by the Preliminary Medical Screening Section at Ottawa is related to the Government announcement in July 1966 to the effect that applications for permanent residence would be accepted from certain categories of non-immigrants already in Canada, although there was also a significant increase in medical submissions processed at Ottawa from other countries.

#### Northern Health

Since 1st April 1966, the supervision of health matters in the two Northern Territories has been under the control of one Regional Director of Northern Health Services. The Regional Office is presently located in Edmonton which offers most rapid lines of communication with most major centres of population in this vast area. The Director travels frequently and extensively and keeps in personal contact with his subordinate officers in charge of local field operations. One other factor influencing the choice of base was that, until very recently Charles Camshell Hospital in Edmonton was used as the major treatment centre for seriously ill Indians and Eskimos evacuated from the Territories. This situation is now changing slowly with the development of better medical treatment facilities in the Territories themselves and, as more extensive lines of communication are developed between the sparsely populated North and better medical facilities in the South, the use of other treatment centres develops. With the projected development of Yellowknife as the Territorial Capital of the Northwest Territories, the possibility of developing a main base in that City is under consideration but, at present, Edmonton still provides the most convenient centre from which to direct operations.



Health problems in the North have many unique features. The population is small and widely dispersed over very difficult terrain. Good housing is extremely expensive to provide and maintain. The bulk of the indigenous population still depend largely on hunting for a livelihood. Climatic conditions are particularly testing. Many social amenities developed in the South are either lacking or severely limited. Communications are difficult and often completely cut off for days at a time by weather conditions. As might be expected, pneumonia is much the commonest cause of death. Alcoholism is a major problem. Mental illness is unusually frequent. Venereal diseases are widespread and many times more prevalent than in Southern Canada although the Director reports that, in 1966, the incidence rate has remained the same as in 1965 and not doubled as it has been doing annually for the past three years. Accidental mortality is very common and infant mortality is extremely high even among the non-native population. In 1966 the respective infant mortality rates for the different ethnic groups were

|                                                |                                   |
|------------------------------------------------|-----------------------------------|
| Indian residents of the Northern Territories   | 46.2 per 1000 live births         |
| Eskimo       "       "       "       "       " | 108.8   "       "       "       " |
| Other       "       "       "       "       "  | 52.4   "       "       "       "  |

With the interesting exception of the Indians, these rates represent an increase in infant mortality over previous recent years. Caution must be used in reading these rates, however, as they are based on relatively small numbers. There were actually only 11 deaths of Indian infants under 1 year of age out of 238 born alive, 58 Eskimo deaths out of 533 born alive and 16 deaths out of 305 children of other ethnic origin born alive. One Eskimo woman died in childbirth, giving the apparently startling high rate of 18.8 per 1000 births. This, however, is the only maternal death to have occurred in the North for three years.

In relation to the alcohol problem, recent research conducted by the Internist in charge of the Northern Research Unit, is tending to demonstrate that alcohol is metabolised by Eskimos at only half the rate at which it is metabolised by other ethnic groups which may result in a cumulative effect. These investigations, part of a larger study into glycosuria, are continuing.

Improvement is reported in the mental health program and a new mental health ordinance has been drafted. Most severely ill mental disease cases are transferred to southern provincial mental hospitals for treatment as psychiatric services in the North are still provided only on a sporadic basis by visiting consultants.

During the year a severe epidemic of influenza was experienced with 5013 cases being notified. This may account in part for the increase in infant mortality, almost entirely due to deaths from pneumonia.

Although the health situation in the North can not be regarded as satisfactory and is constantly hampered by lack and loss of competent professional staff, quite striking improvement has been achieved over the past decade. Better facilities have been built, more nursing stations provided, two more within the past year, as previously noted, local Community Health Workers have been trained and are effecting marked improvements among Indian and Eskimo communities and the dental health



services have been markedly improved. The Director reports that, "This is the first time in the history of Northern dentistry in which we have experienced the hope of an improvement". Eskimo mortality is probably the most sensitive barometer of what is happening in the North and it is significant that the crude death rate for Eskimos from all causes has been reduced from 29 per 1000 of population in 1956 to 12 per 1000 in 1966. The Eskimo infant mortality was sharply reduced from 238 per 1000 live births in 1956 to 94 per 1000 live births in 1964 since when it tended to increase again slightly and appears to be resisting all efforts to reduce further in contrast with the continuous steady lowering of the infant mortality rate among the Indian neighbours of the Eskimos. The Eskimo birth rate is now also tending to fall slightly but still stands at around 55 per 1000 of population, one of the highest birth rates recorded in the world. The Eskimo vital index in 1966 was 4.33, i. e. for every Eskimo death there were 4.33 live births.

### Indian Health

Although statistical data for 1966 are not yet complete, the data for 1965 suggest that a definite improvement is developing in Indian health. The estimated mid-year population increased from 208,203 in 1964 to 214,744 in 1965, a net increase of 6,541 or 3.14% on the previous year. The vital index or the number of births divided by the number of deaths was 4.63, in other words, for every Indian death there were 4.63 live births. The natural increase or number of births in excess of the number of deaths was 6,829 or 3.28% of the estimated mid-year population in the previous year, 3.18% of the estimated mid-year population in 1965. The natural increase in the Indian population has been slowly increasing annually. In 1960 it was not quite 3% of the estimated mid-year population and is now 3.2%. The lower net increase is, therefore, not due to mortality but to the increasing number of Indians who now annually are giving up their "Indian status".

The number of Indian deaths recorded in 1965 was 1,881, the lowest number on record, giving a crude death rate of 8.76 per 1000 of population. This compares with the national death rate for all Canadians in 1965 of 7.6. The number of children recorded as born in 1965 was 8,710, giving a crude birth rate of 40.56 per 1000 on the basis of the estimated Indian mid-year population. The national birth rate for all Canadians in 1965 was 21.4, in 1966, 19.4 per 1000 of population. The Indian birth rate has been fairly constant at 40 per 1000 for the past four years while the national rate has been rapidly declining. The infant mortality, always a sensitive index of health conditions, has declined from 61.6 per 1000 live births in 1964 to 48.22 per 1000 of live births in 1965, almost precisely twice the national infant mortality rate in 1965 of 23.6 but still a most significant drop. In 1956, Indian infant mortality was at the rate of 96 per 1000 live births. In 1965 it had fallen to 48 per 1000 live births, a drop of 50% in one decade.

One not so pleasing feature was that, of the 8710 infants born in 1965, no less than 2779 or 32% were born out of wedlock. The Indian illegitimate birth rate in 1965 was, therefore, 12.52 per 1000 of estimated mid-year population, markedly in excess of the national rate.



A highlight of the year was the completion of a study in some detail of the causes of Indian infant mortality based on a careful recording of all the events happening to 5,598 infants born in 1962 who were followed closely for the first twelve months of their lives. Collection of the data was not completed until early in 1964 and the analysis took over two further years to complete. The results were distributed to delegates attending the National Conference on Maternal and Child Health held in Ottawa in March 1967. This study revealed a very significant difference in the mortality of infants whose mothers had attended pre-natal classes and had pre-natal care from that experienced among the infants of mothers who had not had such care. Infant mortality among the infants of Indian women receiving good pre-natal care and following nursing advice was at the rate of 3%, not much in excess of the national rate, whereas among the children of mothers not receiving care or following advice it was over 10%. The study also revealed that about one quarter of Indian mothers that year had escaped nursing oversight and this group of women lost almost as many infants as the other three quarters put together in spite of the fact that many of them had received only minimal care and had benefitted only moderately. The loss of infant life bore a direct relationship to the duration and quality of nursing care given, the quality of home care, adequacy and suitability of diet and even to the duration of breast feeding.

The principal causes of Indian mortality remained pneumonia and accidents but the proportion of deaths due to these causes is tending to drop slowly. The worst record for fatal accidents is held by Indians in British Columbia and automobile accidents are the principal cause closely followed by fire and drowning. Although infant mortality has declined as a whole it is still excessive among prairie Indians in particular and the general pattern of causes remains much as in previous years. Considerable improvement in environmental sanitation is reported from most areas but the general standard of living is still much too low.

Negotiations continue with provincial health authorities for further extension of provincial services to Indians. In Alberta and Saskatchewan progress has been made and it is anticipated that the introduction of general medical care insurance will greatly facilitate these negotiations. Ontario is considering special legislation to enable local Health Units to include neighbouring Indian reserves within their sphere of responsibility.

#### Treatment Services

For many years Medical Services has paid for medical care rendered eligible Indians in terms of its own Fee Schedule, which when published was in line with and, in some instances better than the various provincial fees for indigent care across Canada. During 1966 many of the provinces converted to paying a percentage of provincial Fee Schedules, as set forth by the provincial Colleges of Physicians and Surgeons or other official medical bodies, for professional services to indigents. Medical Services, usually with the concurrence of the appropriate provincial medical organizations, changed its fees to correspond with these arrangements. These new tariffs now apply in all provinces except the four Maritime provinces. Other events occurred in the past year which more closely integrated Indian health care with the rest of the country. The Nanaimo Indian Hospital was phased out, as the



physical plant was becoming antiquated and adequate facilities became available in the community. The reverse situation occurred at Fort Qu'Appelle, Saskatchewan, when local practitioners were granted admitting privileges for their private patients at the federal hospital there. At the Charles Camsell Hospital arrangements were concluded with the University of Alberta School of Medicine for the appointment of a full-time geographic paediatrician who will have his office at the Charles Camsell Hospital, be on the teaching staff of the University and also be available to Medical Services for consultative work in the field. Further explorations are being conducted into the feasibility of making similar arrangements with other departments of the University of Alberta Medical School. Other medical personnel at university teaching centers are becoming involved with the medical care of Indians and Eskimos, specialists' tours have been or are being arranged for the north: liaison has been established between our hospital in Moose Factory and Queens University, to name a few. Also, to familiarize the forthcoming graduates in medicine with the problems connected with northern health, the Department will be conducting a school in frontier medicine to be held in August 1967 in Inuvik which will be attended by 70 medical students from across Canada.

#### Food Services and Hospital Housekeeping in Medical Services

The principal dietitian at head office has continued to provide advice on matters relating to food service and nutrition, and on hospital housekeeping. Close co-operation is maintained with other programs in Medical Services notably health education and nursing. One result of such co-operation has been the production of a revised edition of the booklet "Mother and Baby".

In 1966, for the first time, two Home Economic students were employed for summer work. They were 1966 graduates of the University of Manitoba and worked under direction in Saskatchewan. It was a successful venture and will be repeated in 1967 in Manitoba and Alberta.

#### Bulletins

Ten issues of the "Food Services Bulletin" and "Hospital Housekeeping" have been prepared and distributed to food service and housekeeping staffs in Medical Services Hospitals. These publications provide a means of communication with these groups who are performing an important service.

During this year food services have been supplied on a contract basis in two hospitals - Frobisher Bay and Moose Factory. Housekeeping services are done on contract in three hospitals, Frobisher Bay, Moose Factory and North Battleford. The hospitals at Frobisher Bay and Moose Factory were visited during the year and reports on the food service and housekeeping were submitted. The results so far appear to be satisfactory. Though contracting services is not an economy, it does relieve the local and regional administration of much responsibility and the day-to-day personnel problems.

TABLE 12

IMMIGRATION MEDICAL SERVICE

SUMMARY OF ACTIVITIES

1966

CANADA

|                                                                                                 |        |
|-------------------------------------------------------------------------------------------------|--------|
| Medically Examined at I. M. S. offices .....                                                    | 31,522 |
| Certifications as "prohibited" under Sec. 5 (a) (b) (i) and (s) of<br>The Immigration Act ..... | 211    |
| Certifications as physically defective under Sec 5 (c) .....                                    | 4,340  |

OVERSEAS

|                                                                                                |         |
|------------------------------------------------------------------------------------------------|---------|
| Prospective emigrants medically examined.....                                                  | 236,136 |
| British Isles.....                                                                             | 107,552 |
| Europe.....                                                                                    | 110,637 |
| Asia .....                                                                                     | 17,947  |
| Certifications as "prohibited" under Sec. 5 (a) (b) (i) and (s) of<br>The Immigration Act..... | 5,349   |
| Certifications as physically defective under Sec. 5 (c) .....                                  | 24,630  |

ALL OTHER COUNTRIES

|                                                                                         |        |
|-----------------------------------------------------------------------------------------|--------|
| Medically Prescreened at Ottawa.....                                                    | 52,751 |
| Certifications as "prohibited" under Sec. 5 (a) (b) and (i) of The Immigration Act..... | 543    |
| Certifications as physically defective under Sec. 5 (c) .....                           | 6,792  |



TABLE 13

IMMIGRATION MEDICAL SERVICE

CERTIFICATIONS UNDER SECTION 5 OF THE IMMIGRATION ACT

1966

| Certifications Under:                 | CANADA                     |                                      | BRITISH ISLES      |                  | EUROPE             |                           |                              |                       |                    | ASIA                      |        | TOTALS |
|---------------------------------------|----------------------------|--------------------------------------|--------------------|------------------|--------------------|---------------------------|------------------------------|-----------------------|--------------------|---------------------------|--------|--------|
|                                       | Examined at I.M.S. Offices | Medically prescreened at Ottawa H.Q. | Examined by C.M.O. | Examined by R.D. | Examined by C.M.O. | Examined by Roster Doctor | Examined by Local Physicians | Medically Prescreened | Examined by C.M.O. | Examined by Roster Doctor |        |        |
| SS (a)<br>Mental Diseases & Defects   | 80                         | 103                                  | 239                | 11               | 208                | 7                         | 6                            | 10                    | 7                  | 1                         | 672    |        |
| SS (b)<br>Chronic Infectious Diseases | 125                        | 437                                  | 150                | 14               | 956                | 8                         | 41                           | 106                   | 2,972              | 605                       | 5,414  |        |
| SS (c)<br>Physical Defects            | 4,340                      | 6,792                                | 10,814             | 533              | 8,209              | 222                       | 606                          | 1,256                 | 2,291              | 699                       | 35,762 |        |
| SS (i)<br>Alcoholism                  | 3                          | 3                                    | 2                  | 1                | 1                  | -                         | 2                            | -                     | -                  | -                         | 12     |        |
| SS (j)<br>Drug Addiction              | -                          | -                                    | -                  | -                | -                  | -                         | -                            | -                     | -                  | -                         | -      |        |
| SS (s)<br>Mentally Impaired           | 3                          | -                                    | 1                  | 1                | -                  | -                         | -                            | -                     | -                  | -                         | 5      |        |
| TOTALS                                | 4,551                      | 7,335                                | 11,206             | 560              | 9,374              | 237                       | 655                          | 1,372                 | 5,270              | 1,305                     | 41,865 |        |

TABLE 14  
CASES PRESCREENED AT OTTAWA SHOWING COUNTRY OF ORIGIN  
CALENDAR YEAR 1966

| Country           | Total<br>Cases | Examined | Re-<br>Examined | Passed | Certifications |     |       |     | Total<br>Certification |
|-------------------|----------------|----------|-----------------|--------|----------------|-----|-------|-----|------------------------|
|                   |                |          |                 |        | "A"            | "B" | "C"   | "I" |                        |
| Afghanistan       | 3              | 3        | -               | 3      | -              | -   | -     | -   | -                      |
| Algeria           | 53             | 53       | -               | 42     | -              | 2   | 3     | -   | 5                      |
| Argentina         | 661            | 559      | 102             | 595    | 4              | 5   | 70    | -   | 79                     |
| Australia         | 3,583          | 3,425    | 158             | 3,257  | 6              | 1   | 334   | -   | 341                    |
| Azores            | 4,452          | 3,900    | 552             | 4,055  | 4              | 15  | 369   | -   | 388                    |
| Basutoland        | 8              | 6        | 2               | 7      | -              | -   | -     | -   | -                      |
| Bechuanaland      | 1              | -        | 1               | 1      | -              | -   | -     | -   | -                      |
| Bermuda           | 178            | 164      | 14              | 157    | 3              | -   | 26    | -   | 29                     |
| Bolivia           | 19             | 14       | 5               | 17     | -              | 2   | -     | -   | 2                      |
| Brazil            | 679            | 607      | 72              | 553    | 1              | 33  | 108   | -   | 142                    |
| Bulgaria          | 22             | 22       | -               | 18     | -              | -   | 2     | -   | 2                      |
| Burma             | 15             | 6        | 9               | 11     | -              | -   | 1     | -   | 1                      |
| Cambodia          | 7              | 7        | -               | 7      | -              | -   | -     | -   | -                      |
| Cameroon          | 39             | 35       | 4               | 24     | 1              | 7   | 1     | -   | 9                      |
| Canada            | 11,960         | 11,311   | 649             | 9,861  | 26             | 52  | 1,977 | 1   | 2,056                  |
| Central America   | 111            | 105      | 6               | 95     | -              | 6   | 9     | -   | 15                     |
| Ceylon            | 219            | 193      | 26              | 187    | -              | 7   | 33    | -   | 40                     |
| Chile             | 120            | 114      | 6               | 115    | -              | 2   | 5     | -   | 7                      |
| Colombia          | 63             | 61       | 2               | 55     | -              | 6   | 6     | -   | 12                     |
| Congo             | 38             | 37       | 1               | 29     | -              | 2   | 3     | -   | 5                      |
| Cyprus            | 434            | 389      | 45              | 407    | -              | 10  | 15    | -   | 25                     |
| Czechoslovakia    | 144            | 139      | 5               | 125    | 1              | -   | 15    | -   | 16                     |
| Dutch West Indies | 51             | 50       | 1               | 46     | -              | 1   | 5     | -   | 6                      |
| Ecuador           | 17             | 15       | 2               | 14     | -              | 2   | 2     | -   | 4                      |
| Ethiopia          | 48             | 44       | 4               | 44     | -              | -   | -     | -   | -                      |
| Fiji              | 3              | 3        | -               | 1      | -              | -   | 1     | -   | 1                      |
| Gambia            | 4              | 4        | -               | 4      | -              | -   | -     | -   | -                      |
| Ghana             | 109            | 101      | 8               | 88     | 1              | 1   | 16    | -   | 18                     |
| Guyana            | 748            | 622      | 126             | 682    | 2              | 9   | 65    | -   | 76                     |
| Hungary           | 549            | 514      | 35              | 484    | -              | 7   | 48    | -   | 55                     |
| India             | 21             | 21       | -               | 19     | -              | -   | -     | -   | -                      |
| Indonesia         | 18             | 12       | 6               | 8      | -              | 3   | 2     | -   | 5                      |
| Iran              | 2              | 2        | -               | 1      | -              | -   | 1     | -   | 1                      |
| Iraq              | 2              | 2        | -               | 1      | -              | -   | 1     | -   | 1                      |
| Israel            | 2,104          | 1,947    | 157             | 1,949  | 1              | 2   | 153   | -   | 156                    |
| Japan             | 1,097          | 1,037    | 60              | 988    | -              | 4   | 97    | -   | 101                    |
| Jordan            | 3              | 3        | -               | 1      | -              | -   | 2     | -   | 2                      |
| Kenya             | 210            | 194      | 16              | 183    | -              | 4   | 15    | -   | 19                     |
| Korea             | 51             | 46       | 5               | 42     | -              | 3   | 5     | -   | 8                      |
| Lebanon           | 1              | 1        | -               | 1      | -              | -   | -     | -   | -                      |
| Liberia           | 1              | 1        | -               | 1      | -              | -   | -     | -   | -                      |
| Libya             | 3              | 3        | -               | 3      | -              | -   | -     | -   | -                      |



TABLE 14 (Cont'd.)

| Country                | Total<br>Cases | Examined | Re-<br>Examined | Passed | Certification |     |       |     | Total<br>Certification |
|------------------------|----------------|----------|-----------------|--------|---------------|-----|-------|-----|------------------------|
|                        |                |          |                 |        | "A"           | "B" | "C"   | "I" |                        |
| Madagascar             | 4              | 4        | -               | 2      | -             | -   | 1     | -   | 1                      |
| Malawi                 | 7              | 7        | -               | 5      | -             | -   | 1     | -   | 1                      |
| Malaysia               | 126            | 121      | 5               | 116    | 1             | 2   | 5     | -   | 8                      |
| Malta                  | 4              | 4        | -               | 3      | -             | -   | -     | -   | -                      |
| Mauritius              | 56             | 52       | 4               | 50     | -             | 4   | 2     | -   | 6                      |
| Mexico                 | 129            | 117      | 12              | 114    | -             | 4   | 13    | -   | 17                     |
| Morocco                | 83             | 73       | 10              | 59     | -             | 2   | 24    | -   | 26                     |
| New Zealand            | 711            | 682      | 29              | 644    | 2             | 1   | 72    | -   | 75                     |
| Nigeria                | 156            | 144      | 12              | 127    | 1             | 6   | 19    | -   | 26                     |
| Pakistan               | 191            | 159      | 32              | 175    | -             | 2   | 11    | -   | 13                     |
| Paraguay               | 212            | 206      | 6               | 193    | -             | -   | 20    | -   | 20                     |
| Peru                   | 95             | 90       | 5               | 80     | -             | 1   | 9     | -   | 10                     |
| Philippines            | 46             | 41       | 5               | 35     | -             | -   | 9     | -   | 9                      |
| Poland                 | 3,054          | 2,763    | 291             | 2,469  | 2             | 36  | 643   | 1   | 682                    |
| Rhodesia               | 70             | 63       | 7               | 60     | -             | 2   | 11    | -   | 13                     |
| Roumania               | 82             | 67       | 15              | 64     | -             | -   | 29    | -   | 29                     |
| St. Pierre et Miquelon | 4              | 4        | -               | 2      | -             | -   | -     | -   | -                      |
| Senegal                | 3              | 3        | -               | 3      | -             | -   | -     | -   | -                      |
| Seychelles             | 1              | 1        | -               | 1      | -             | -   | -     | -   | -                      |
| Sierra Leone           | 13             | 13       | -               | 10     | -             | -   | 1     | -   | 1                      |
| Singapore              | 54             | 49       | 5               | 52     | -             | 3   | -     | -   | 3                      |
| South Africa           | 922            | 859      | 63              | 868    | 1             | 1   | 104   | -   | 106                    |
| Spain                  | 994            | 980      | 14              | 895    | -             | 7   | 63    | -   | 70                     |
| Sudan                  | 5              | 5        | -               | 4      | -             | -   | 2     | -   | 2                      |
| Surinam                | 3              | 3        | -               | 3      | -             | -   | -     | -   | -                      |
| Swaziland              | 14             | 13       | 1               | 11     | -             | -   | 3     | -   | 3                      |
| Syria                  | 4              | 4        | -               | 3      | -             | -   | 1     | -   | 1                      |
| Tanzania               | 151            | 134      | 17              | 123    | -             | 2   | 26    | -   | 28                     |
| Thailand               | 25             | 24       | 1               | 18     | -             | 1   | 2     | -   | 3                      |
| Tonga                  | 5              | 4        | 1               | 4      | -             | -   | 1     | -   | 1                      |
| Tunisia                | 9              | 8        | 1               | 7      | -             | -   | 1     | -   | 1                      |
| Turkey                 | 1              | 1        | -               | -      | -             | -   | -     | -   | -                      |
| Uganda                 | 127            | 108      | 19              | 109    | -             | 3   | 7     | -   | 10                     |
| Upper Volta            | 2              | 2        | -               | 2      | -             | -   | -     | -   | -                      |
| Uruguay                | 119            | 115      | 4               | 108    | -             | -   | 11    | -   | 11                     |
| U.S.A.                 | 9,829          | 9,489    | 340             | 8,460  | 38            | 19  | 1,434 | 1   | 1,492                  |
| U.S.S.R.               | 277            | 257      | 20              | 171    | 1             | 5   | 152   | -   | 158                    |
| Venezuela              | 409            | 371      | 38              | 363    | -             | 11  | 40    | -   | 51                     |
| Vietnam                | 66             | 58       | 8               | 58     | -             | 3   | 2     | -   | 5                      |
| West Indies            | 5,243          | 4,627    | 616             | 4,734  | 1             | 106 | 396   | -   | 503                    |
| Yugoslavia             | 1,455          | 1,348    | 107             | 1,191  | 6             | 30  | 268   | -   | 304                    |
| Zambia                 | 139            | 138      | 1               | 119    | -             | -   | 19    | -   | 19                     |
| TOTALS FOR 1966        | 52,751         | 48,983   | 3,768           | 45,696 | 103           | 437 | 6,792 | 3   | 7,335                  |
| TOTALS FOR YEAR 1965   | 31,163         | 28,099   | 3,064           | 27,347 | 60            | 184 | 3,990 | 1   | 4,235                  |
| 1964                   | 32,682         | 29,234   | 3,448           | 28,223 | 72            | 300 | 4,597 | -   | 4,969                  |

TABLE 15

SHIPS BOARDED BY QUARANTINE OFFICERS

ORGANIZED QUARANTINE STATIONS

1966

| Stations          | Vessels Inspected | Personnel Inspected |            |           | Port Totals |
|-------------------|-------------------|---------------------|------------|-----------|-------------|
|                   |                   | Crew                | Passengers | Stowaways | Others      |
| Halifax, N.S.     | 810               | 56,885              | 52,902     | 8         | -           |
| Sydney, N.S.      | 102               | 3,811               | 513        | -         | -           |
| Saint John, N.B.  | 423               | 16,123              | 545        | -         | 34          |
| St. John's, Nfld. | 620               | 30,011              | 79         | -         | -           |
| Toronto, Ont.     | 9                 | 293                 | -          | -         | -           |
| Quebec, P.Q.      | 3,155             | 144,159             | 58,523     | 31        | -           |
| Vancouver, B.C.   | 923               | 10,990              | 15,237     | 5         | -           |
| Victoria, B.C.    | 956               | 37,062              | 478        | -         | -           |
| TOTALS            | 6,998             | 299,334             | 128,277    | 44        | 34          |
|                   |                   |                     |            |           | 427,689     |



TABLE 16  
SMALLPOX SURVEILLANCE ORDERS  
1966

|                         |       |
|-------------------------|-------|
| Calgary, Alta.          | 150   |
| Dorval, P. Q.           | 2,503 |
| Edmonton, Alta.         | 56    |
| Frobisher Bay, N. W. T. | 2     |
| Gander, Nfld.           | 150   |
| Halifax, N. S.          | 74    |
| Malton, Ont.            | 1,186 |
| Ottawa, Ont.            | 10    |
| Quebec, P. Q.           | 578   |
| Saint John, N. B.       | 4     |
| St. John's, Nfld.       | 4     |
| Trenton, Ont.           | 179   |
| Vancouver, B. C.        | 1,015 |
| Winnipeg, Man.          | 341   |
| TOTALS                  | 6,252 |

TABLE 17  
INSPECTION OF AIRCRAFT SUBJECT TO QUARANTINE

| Airport                                                             | No. of<br>Aircraft | No. of<br>Crew | No. of<br>Passengers | Stowaways<br>and Others | Total<br>Persons |
|---------------------------------------------------------------------|--------------------|----------------|----------------------|-------------------------|------------------|
| Ancienne Lorette, P. Q.                                             | 2                  | 12             | 110                  | -                       | 122              |
| Bagotville, P. Q.                                                   | 3                  | 30             | 53                   | -                       | 83               |
| Calgary, Alta.                                                      | 159                | 1,412          | 13,948               | 118                     | 15,478           |
| Dorval, P. Q.                                                       | 5,008              | 45,656         | 413,056              | -                       | 458,712          |
| Edmonton, Alta. (including<br>International, Industrial<br>& Namao) | 238                | 2,209          | 20,058               | 45                      | 22,312           |
| Fredericton, N. B.                                                  | 77                 | 608            | 2,191                | -                       | 2,799            |
| Frobisher, N. W. T.                                                 | 94                 | 567            | 2,300                | -                       | 2,867            |
| Gander, Nfld.                                                       | 1,380              | 12,865         | 105,737              | -                       | 118,602          |
| Goose Bay, Nfld.                                                    | 638                | 4,144          | 10,487               | -                       | 14,631           |
| Greenwood, N. S.                                                    | 141                | 2,899          | 608                  | -                       | 3,507            |
| Halifax, N. S.                                                      | 261                | 2,400          | 25,631               | -                       | 28,031           |
| Malton, Ont.                                                        | 2,131              | 19,313         | 210,467              | -                       | 229,780          |
| Moncton, N. B.                                                      | 9                  | 83             | 305                  | -                       | 388              |
| Ottawa, Ont.                                                        | 162                | 1,836          | 5,307                | -                       | 7,143            |
| Regina, Sask.                                                       | 1                  | 8              | 100                  | -                       | 108              |
| Saskatoon, Sask.                                                    | 9                  | 73             | 789                  | -                       | 862              |
| Seven Islands, P. Q.                                                | 12                 | 70             | 5                    | -                       | 75               |
| Summerside, P. E. I.                                                | 130                | 2,009          | 573                  | -                       | 2,582            |
| Sydney, N. S.                                                       | 16                 | 134            | 1,447                | -                       | 1,581            |
| St. John's, Nfld.                                                   | 7                  | 15             | 5                    | -                       | 20               |
| Trenton, Ont.                                                       | 582                | 5,696          | 18,141               | -                       | 23,837           |
| Vancouver, B. C.                                                    | 707                | 7,191          | 64,377               | 1                       | 71,569           |
| Victoria, B. C.                                                     | 1                  | 8              | 111                  | -                       | 119              |
| Windsor, Ont.                                                       | 18                 | 151            | 1,236                | -                       | 1,387            |
| Winnipeg, Man.                                                      | 251                | 2,592          | 29,421               | -                       | 32,013           |
| TOTAL                                                               | <u>12,037</u>      | <u>111,981</u> | <u>926,463</u>       | <u>164</u>              | <u>1,038,608</u> |



TABLE 18  
21 (a) -  
Birth Rates, Death Rates and Infant Mortality Rates  
for Indians, Eskimos and all Canadians  
1956 - 1965

| Year | Crude Birth Rates<br>per 1000 of population |        |          | Crude Death Rates<br>per 1000 of population |        |          | Infant Mortality Rates<br>per 1000 live births |        |          |
|------|---------------------------------------------|--------|----------|---------------------------------------------|--------|----------|------------------------------------------------|--------|----------|
|      | Indian                                      | Eskimo | Canadian | Indian                                      | Eskimo | Canadian | Indian                                         | Eskimo | Canadian |
| 1956 | X38.3                                       | 53.3   | 28.0     | X9.6                                        | 28.5   | 8.2      | 96                                             | 238    | 32       |
| 1957 | 44.3                                        | 51.1   | 28.2     | 10.3                                        | 20.2   | 8.2      | 85                                             | 228    | 31       |
| 1958 | 44.0                                        | 53.4   | 27.5     | 9.3                                         | 25.3   | 7.9      | 86                                             | 235    | 30       |
| 1959 | 43.9                                        | 53.3   | 27.4     | 9.1                                         | x19.4  | 8.0      | 75                                             | 206    | 28       |
| 1960 | X41.9                                       | 56.2   | 26.8     | X10.75                                      | 24.00  | 7.8      | 79                                             | 210    | 27       |
| 1961 | 41.43                                       | 59.0   | 26.1     | 10.01                                       | 22.00  | 7.7      | 76                                             | 211    | 27       |
| 1962 | 40.26                                       | 61.0   | 25.3     | 10.41                                       | 23.00  | 7.7      | 75                                             | 194    | 28       |
| 1963 | 40.03                                       | 59.8   | 24.6     | 10.12                                       | 17.4   | 7.8      | 70                                             | 157    | 26       |
| 1964 | 39.62                                       | 64.5   | 23.5     | 9.27                                        | 14.8   | 7.6      | 62                                             | 94     | 25       |
| 1965 | 40.56                                       | 55.8   | 21.4     | 8.76                                        | 11.1   | 7.6      | 48                                             | 95     | 24       |

X Prior to 1960, estimated on current year end population, from 1960 onward, estimated on current year estimated mid-year populations. Hence apparent increase in the mortality rate. The drop in birth rate at 1960 is even more significant than appears.

x Based on incomplete data. True rate probably in excess of 24 per 1000. Eskimo rate now approximating Indian rate in previous decade.

Sources: Canadian rates, Dominion Bureau of Statistics; Indian and Eskimo rates, Medical Services, Department of National Health and Welfare.

Note: Eskimo infant mortality is now at the rate at which Indian infant mortality stood ten years before. Eskimo rates in general show a ten year lag behind Indian rates. The drop in the past ten years has, however, been more rapid.





## DOMINION COUNCIL OF HEALTH

The Dominion Council of Health advises the Minister on matters relating to the health of the people of Canada. It provides a valuable means of co-ordination respecting provincial health programs, and between federal and provincial health authorities. Meetings, as a rule, are held twice a year.

In 1966, the Dominion Council of Health met in May and October when consideration was given to a number of matters of concern to public health in Canada. At the May meeting, family planning programs sponsored by public health agencies were discussed and a recommendation made to the Minister supporting an amendment to the Criminal Code by the removal of the words "preventing conception or" from Section 150(2)(c). In addition to the presentation of Reports of Committees advisory to the Council, discussion took place on the need for destination addresses of arriving passengers via airlines for surveillance and quarantine purposes, the current situation with regard to measles vaccine; the medical examination of immigrants; reports on the third national tuberculosis conference and on a conference on local health services; measures for the control of substances which may constitute a health hazard; the addition of Vitamin D to milk; and a feasibility study on notification by the Food and Drug Directorate of the contamination of food and drugs. The plan for a Health Resources Fund was outlined to Council members, as well as the current situation concerning the medical care program.

At the Fall meeting in October, further information on immunization programs generally, was provided. Reports were received from the Schools of Hygiene of the Universities of Toronto and Montreal with regard to courses in public health. Legislative measures for the control of substances which may constitute a health hazard were described, and progress reports on the Health Resources Fund and medical care arrangements were given. A proposal for a meeting of provincial directors of health education to be held in December was approved, as well as a proposal for the setting up of a committee of enquiry into the status and employment of dental auxiliaries. Among other subjects discussed were the smoking and health program, current air pollution problems in Canada, and the transportation of corpses.

The National Health Grants Program and progress reports on the Health Insurance and Diagnostic Services program were discussed at both sessions. Advisory Committees reporting to Council during 1966 included those on Immunizing Agents, Public Health Laboratory Services, Mental Health, Dental Health, Epidemiology, Public Health Research, Maternal and Child Health, and International Health.



Canada Pension Plan benefits help to make it financially feasible for elder citizens to enjoy bowling and other hobbies.



## CANADA PENSION PLAN

The Act establishing the Canada Pension Plan specifies that the Minister of National Health and Welfare is responsible for the administration of all Parts of the Act except Part I which comes under the jurisdiction of the Minister of National Revenue. Part I is concerned with coverage of persons under the Plan and the collection of contributions. Certain specialized aspects of the Plan have been assigned to the Unemployment Insurance Commission, the Department of Finance including the Office of the Comptroller of the Treasury, and the Chief Actuary of the Department of Insurance.

In accordance with Section 118 of the Canada Pension Plan a separate Report is being published covering the activities of all Departments and agencies involved in the administration of the Plan during the fiscal year. The following presents the section of that Report which deals with the activities of the Department of National Health and Welfare, together with a resumé of those sections describing the activities of the other Departments and agencies.

Planning of the organizational structure of the Canada Pension Plan Administration of the Department of National Health and Welfare was completed and approved by the Treasury Board. This structure consists of a Head Office establishment comprised of three main Divisions, namely Benefits, Field Services, and Claims, Accounting and Control. In addition, there are Offices which relate to Planning and Development, General Administration and Legal Services.

Under the Field Services Division, a network of offices to serve the public was developed and brought into operation in 1966-67. This network is based on thirty-seven District Offices located in major population centres outside the Province of Quebec. The centres are: St. John's, Corner Brook, Charlottetown, Halifax, Antigonish, Sydney, Moncton, Saint John, Fredericton, Edmundston, Toronto, Etobicoke, Scarborough, North York, Hamilton, London, St. Catharines, Sault Ste. Marie, Timmins, Kingston, Peterborough, Sudbury, Ottawa, Windsor, Port Arthur-Fort William, Kitchener-Waterloo, Winnipeg, Brandon, Regina, Saskatoon, Edmonton, Lethbridge, Calgary, Victoria, Vancouver, Penticton, and Whitehorse.

Designed to function under the direct supervision of four Area Superintendents, District Offices provide a full range of Canada Pension Plan services including the receiving of applications for benefits, assisting in the completion of applications where necessary, counselling, explaining pension computations, securing documentary proof of age and providing information to the public on all aspects of benefits under the Plan.

By March 31, 1967, permanent accommodation had been acquired for 23 of the 37 District Offices and negotiations were under way with a view to obtaining permanent space for the other 14 Offices.

To supplement the services provided by District Offices, Local Offices were established on a part-time basis in sixty additional centres as follows: Grand Falls, Yarmouth, Kentville, Amherst, Truro, Inverness, Newcastle, Campbellton, Pembroke, Hawkesbury, Smiths Falls, Cornwall, Belleville, Bracebridge, Oshawa, Barrie, Newmarket, Brampton, Oakville, Brantford, Simcoe, Welland, Owen Sound, Stratford, Walkerton, Sarnia, Woodstock, St. Thomas, Chatham, North Bay, Parry Sound, Kirkland Lake, Kapuskasing, Elliot Lake, Kenora, Fort Frances, Portage La Prairie, Dauphin, The Pas, Flin Flon, Yorkton, Moose Jaw, Weyburn, Estevan, Swift Current, North Battleford, Prince Albert, Medicine Hat, Red Deer, Grande Prairie, Cranbrook, Castlegar, Dawson Creek, Kamloops, Prince George, Prince Rupert, New Westminster, Chilliwack, Nanaimo and Courtenay.

Operating usually one day a week in premises of the Unemployment Insurance Commission, Local Offices are staffed by personnel from the District Offices and bring the total number of Canada Pension Plan service outlets to ninety-seven. At year-end, consideration was being given to establishing and operating, on a similar basis, additional Local Offices in premises of the Department of Manpower and Immigration.

By arrangement with the Old Age Security Administration, all Canada Pension Plan District and Local Offices answer inquiries relating to the Old Age Security Pension and the Guaranteed Income Supplement. These offices forward applications for these benefits to the Old Age Security Regional Offices, provide field assistance in obtaining from applicants the proof of age documents required by the Old Age Security Administration, and furnish such other services as that Administration may request.

Applications for Retirement Pensions under the Canada Pension Plan made in each province are channelled through the Old Age Security Regional Office in the provincial capital to obtain verification of the applicant's date of birth and to make arrangements for combining in one cheque the Retirement Pension and the Old Age Security Pension where the latter pension is also payable.

Regulations with regard to Retirement Pensions were drafted and forwarded to the Department of Justice for review and preparation in final form. Operational procedures for the filing and processing of Retirement Pension applications were developed and a detailed manual was prepared. To brief field staff on procedures, four Conferences were held in December, 1966 -- one with District Managers at Ottawa, and three with District Managers and Field Officers at Toronto, Calgary and Halifax. Forms required to implement procedures were drafted, printed, and distributed to all District and Local Offices.

Filing of applications commenced in December, 1966 and the first Retirement Pensions were put into pay in January, 1967. During the calendar year 1967, these pensions are payable to contributors who are 68 years of age or more, provided that, if under age 70, they are retired from regular employment. By March 31, 1967, which was the end of the first three months during which benefits were payable, a total of 3,475 persons were receiving Retirement Pensions.



Of the 3,475 recipients, 2,843 were male and 632 female. The geographical distribution of recipients was as follows:

|                  |   |              |
|------------------|---|--------------|
| Newfoundland     | - | 54           |
| P. E. I.         | - | 20           |
| Nova Scotia      | - | 134          |
| New Brunswick    | - | 99           |
| Quebec           | - | 8*           |
| Ontario          | - | 2,175        |
| Manitoba         | - | 209          |
| Saskatchewan     | - | 136          |
| Alberta          | - | 205          |
| British Columbia | - | 425          |
| Outside Canada   | - | 10           |
|                  |   | <u>3,475</u> |

With few exceptions, recipients of Retirement Pensions were also eligible for the Old Age Security Pension and received cheques combining the two benefits. In addition, in March 1967, payment of the Guaranteed Income Supplement was first made to pensioners who were eligible for this further benefit.

In late June 1966, the Head Office of the Canada Pension Plan Administration in Ottawa was moved from No. 8 Temporary Building to 255 Argyle Avenue where it now occupies the upper two floors of that structure. The lower two floors are utilized by the Office of the Comptroller of the Treasury which has, over and above its statutory duties, the temporary responsibility for the operation of the electronic data processing section of the Administration.

Job descriptions for further positions on the establishment were completed and were approved by the Public Service Commission as to classification and salary range. The establishment for 1966-67 was revised upwards from 206 to 276 and at year-end, 209 positions had been filled -- 46 at Head Office and 163 in the field. Of the total staff employed, 8 were in senior administrative positions, 10 in other administrative posts, 127 were District Managers or Field Officers, and 64 were in clerical and stenographic categories.

Four training courses were carried out for field staff -- three of three weeks duration, and one of two weeks duration. In addition, a continuing training and review program was conducted in the District Offices.

In accordance with Section 85 of the Act governing the Canada Pension Plan, the Pension Appeals Board was established during the fiscal year. The Board consists of three members -- the Hon. Paul-Emile Côté, Judge of the Superior Court of Quebec, who serves as Chairman; the Hon. Mr. Justice Alfred Monnin of the Court of Appeals of Manitoba; and His Honour Judge M. L. Tyrwhitt-Drake of the County Court, Victoria, British Columbia.

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\* Recipients who contributed to the Canada Pension Plan while in the Province of Quebec or who took up residence in that Province after they ceased to make contributions to the Plan.

This Board has been designated by the Government of Quebec to be the Review Commission for purposes of the legislation governing the Quebec Pension Plan.

Rules pertaining to the operation of the Pension Appeals Board were developed in collaboration with the Quebec Pension Board. After they were concurred in by the Government of Quebec, the rules were approved by the Governor-in-Council. Accommodation for the Board is being obtained in Ottawa and steps were taken to appoint the Registrar and clerical and stenographic staff.

Close co-operation with the Quebec Pension Board in all areas of mutual interest was maintained through a series of meetings covering such items as draft regulations for Retirement Pensions, operating procedures with respect to such pensions, determination of the costs of operating the Social Insurance Number Central Index, an examination of provisions of the Canada and Quebec Pension Plans regarding the administration and payment of Survivors' and Disability Benefits, the Pension Index, the Earnings Index, the release of confidential information to third parties, and public relations.

An agreement was concluded with the Government of Quebec regarding the payment of benefits to persons who have contributed to both the Canada and Quebec Pension Plans and to their survivors. Under this agreement, applicants who reside in Canada but outside the Province of Quebec make application for a benefit to the Canada Pension Plan. Conversely applicants who are residing in the Province of Quebec when claiming a benefit make application to the Quebec Pension Plan. If such persons are residing outside of Canada when applying for a benefit, they may make application to either Plan. In all cases, only one benefit cheque is issued to the beneficiary and the cost of the benefit is shared by the two Plans in accordance with the formula set out in the legislation.

In July 1966, officials of the Canada and Quebec Pension Plans met in Washington with officers of the United States Social Security Administration. Discussions centred on whether Canada could be considered as having a social insurance system which met, for the purpose of paying benefits to Canadians outside the United States, the requirements of the United States Social Security Act. The United States Social Security Administration subsequently recognized Canada as having such a system, thereby making it possible for Canadian citizens with less than ten years' coverage or residence in the United States to receive social security benefits outside that country regardless of their length of absence and where they choose to reside.

The matter of reciprocal arrangements between the United States and Canada with respect to pension programs was also explored at the Washington meeting, and, as a result, studies were initiated with respect to the feasibility and extent of such arrangements.

A variety of informational material was issued with a view to keeping the public abreast of new developments and to providing a detailed explanation of benefits available under the Plan. This material included Ministerial



Press Releases announcing the establishment of District and Local Offices, as well as the recognition by the United States of Canada as a country which has a social insurance system meeting the requirements of the American legislation. In addition, a nationwide advertising program was carried out in December, 1966, to highlight the location and functions of District Offices, and to emphasize the importance of the prompt filing of applications for Retirement Pensions where payment was to commence in January, 1967. The program utilized daily and weekly newspapers, the ethnic press and selected farm publications as well as television and radio.

An article on the Canada Pension Plan was written for a Financial Post Report on Pensions and material on benefits was drafted for a Department of National Revenue Booklet directed to the self-employed, and for a Booklet published by the Department of Manpower and Immigration. At the end of the fiscal year, work was continuing on a general informational brochure dealing with Retirement Pensions. This is scheduled for publication and distribution during the fiscal year 1967-68.

To ensure the co-ordination of activities of the various Departments and agencies involved in the Canada Pension Plan, a permanent Inter-departmental Committee was established under the Chairmanship of the Director of the Canada Pension Plan Administration of the Department of National Health and Welfare. The Committee consists of representatives of the Department of National Health and Welfare, the Department of National Revenue, the Department of Finance including the Office of the Comptroller of the Treasury, the Unemployment Insurance Commission, and the Department of Insurance. On January 12, 1967, the Committee held its first meeting in the course of which it was decided to establish a Sub-Committee on Administrative costs.

Planning was initiated with respect to the administration of Survivors' Benefits which are scheduled for payment commencing in February, 1968. These benefits consist of a widow's pension, a disabled widower's pension, an orphan's benefit and a lump-sum death benefit. Planning in this area involves an intensive and detailed study of all provisions in the legislation relating to these benefits, the drafting of regulations, the adaptation of certain procedures already developed for the administration of Retirement Pensions, the development of special procedures related to Survivors' Benefits, the drafting of necessary Forms, and the training of staff in the administration of this aspect of the Canada Pension Plan.

Certain features of the administration of Survivors' Benefits have a direct relationship to disability which is a specific eligibility requirement for the payment of Disability Pensions which will first be paid in May, 1970. A disabled widow, a disabled widower, and a disabled child over 18 years of age who may qualify his mother for a widow's pension, will have to meet the legislative requirements with respect to disability in the same manner as the disabled contributor who applies for a disability pension. Accordingly, as part of the planning for implementation of Survivors' Benefits, attention has been directed towards the development of regulations and procedures for the determination of disability. Planning in the area of Survivors' Benefits and Disability Pensions is being carried out jointly with the Quebec Pension Board.

With respect to the other Departments and agencies involved in administration of the Plan, the Unemployment Insurance Commission is responsible for the assignment of Social Insurance Numbers and for the maintenance of the Central Index which provides an up-to-date record of all Numbers issued. As of March 31, 1967, a total of 9,662,506 Numbers had been issued, of which 2,661,946 had been assigned to residents of the Province of Quebec and 7,000,560 to residents of other parts of Canada.

While most of the Numbers were assigned to persons who contribute to either the Canada or Quebec Pension Plans, some were issued to persons under 18 years of age who are required to contribute to Unemployment Insurance, and others were assigned to persons who made application on a voluntary basis but did not contribute under either of the Pension Plans or to Unemployment Insurance.

Under Part I of the Canada Pension Plan, the Department of National Revenue, Taxation, continued to carry out collection, accounting and reporting procedures in accordance with established time schedules.

As of March 31, 1967, an estimated 6,266,000 employees and 1,447,000 self-employed persons were liable to make contributions to the Plan. In addition, an estimated 336,750 employers were liable to make contributions on behalf of their employees. The amount of contributions credited to the Plan during the fiscal year was \$587,202,309.

In May, 1966, Agreements with the Provinces of Saskatchewan and Nova Scotia were amended, the former to exclude members of the Legislative Assembly from coverage under the Canada Pension Plan, and the latter to bring members of the Legislative Assembly under the Plan. In December, 1966, the Agreement with Saskatchewan was further amended to include employment by the Saskatchewan Transportation Company within coverage of the Plan.

In addition, an Agreement was signed with the Province of Quebec whereby Quebec civil servants and employees of agencies of that province can have their contributions to the Quebec Pension Plan taken into account for purposes of the Canada Pension Plan if they should at any time become contributors to the latter Plan. At year-end, a further Agreement was being worked out with the Province of Quebec dealing with the refund of overpayments of contributions.

Agreements were signed with New Zealand, the United Kingdom, Australia and Finland to bring their locally employed staff within coverage of the Canada Pension Plan. At year-end, similar Agreements were being negotiated with the Governments of France, the United States, West Germany, Denmark, Switzerland and Japan.

Under the Act, the Department of Finance is responsible for administration of the Canada Pension Plan Account and the Canada Pension Plan Investment Fund.

The Canada Pension Plan Account is credited with all contributions received and other revenues including interest earned. It is charged with



benefit payments, administrative costs and other expenses including refunds of contributions. During the fiscal year 1966-67, revenues totalled \$599,903,163. Adding these revenues to the balance on hand at April 1, 1966 of \$89,405,854 and deducting administrative costs of \$8,377,581, and benefit payments of \$50,774, the balance of the Account stood at \$680,880,662 as of March 31, 1967. This amount less holdings of \$615,521,000 in the Investment Fund resulted in the Account having an operating balance of \$65,359,662 at year-end.

The amount available through the Canada Pension Plan Investment Fund for the purchase of provincial and federal securities equals the operating balance in the Canada Pension Plan Account less the estimated sum required to cover the cost of benefits, administrative costs and other expenditures in the next three months. Once this amount has been determined at the end of each month, the sum available for each province is based on the proportion which the contributions credited to the Canada Pension Plan Account by and on behalf of its residents bear to the total contributions credited to the Account. Following the allocation of the amounts to the provinces, the residual balance, attributable to the Yukon and Northwest Territories, together with any funds not taken up by the provinces, are available for the purchase of securities of the Government of Canada.

During the fiscal year under review, each province sold securities to the Investment Fund in the amount equal to its allocation. The total value of these securities amounted to \$578,876,000. With federal securities acquired by the Fund amounting to \$1,792,000, transactions during 1966-67 totalled \$580,668,000. Taking into account securities purchased in 1965-66, the Fund's total holdings at March 31, 1967, amounted to \$615,521,000.

In addition to its responsibilities for accounting and auditing functions in relation to the Canada Pension Plan Account and Investment Fund, the Office of the Comptroller of the Treasury had previously been requested to plan, install and undertake the initial operation of the electronic data processing system which is designed to maintain each contributor's Record of Earnings, and calculate the amount of the benefit payable under the Plan to each beneficiary.

Following delivery of the equipment in August, 1966, a considerable period was required to complete and test the installation, train necessary staff, and resolve the many problems normally encountered in making a large-scale electronic data processing system fully operational.

In January 1967, the processing of Retirement Pension Applications commenced and the first cheques were prepared and delivered to the pensioners concerned on January 27. A total of 1,501 cheques were issued in January. This increased by 1,077 in February and by a further 897 in March for a total of 3,475 pensions in pay on March 31, 1967.





Family Allowances help to keep children happy and healthy like this attractive youngster.



## FAMILY ALLOWANCES

During the fiscal year 1966-67 the net payments of Family Allowances were \$555,794,947. In the last month of the year, 2,833,941 families received an average of \$16.42 on behalf of 6,882,874 eligible children.

Family Allowances are payable in respect of every child under the age of sixteen years provided he or she has been registered for the allowances, is resident in Canada, is maintained by a parent or other person and, if of school age, is in regular attendance at school, unless excused under provincial law. Payment is made by cheque each month, normally to the mother, although any person or recognized child placing agency - not including an institution - by whom the child is maintained may be paid the allowance on his behalf. Allowances are paid at the monthly rate of \$6 for each child under ten years of age and \$8 for each child from age 10 to age 16.

The following table shows the number of children per family in receipt of Family Allowances during March, 1967.

| <u>Number of Children<br/>per Family</u> | <u>F a m i l i e s</u> |                |
|------------------------------------------|------------------------|----------------|
|                                          | <u>Number</u>          | <u>Percent</u> |
| 1                                        | 934,553                | 32.9           |
| 2                                        | 826,183                | 29.1           |
| 3                                        | 520,691                | 18.4           |
| 4                                        | 283,501                | 10.1           |
| 5                                        | 136,157                | 4.8            |
| 6                                        | 67,355                 | 2.4            |
| 7                                        | 33,385                 | 1.2            |
| 8                                        | 17,317                 | 0.6            |
| 9                                        | 8,568                  | 0.3            |
| 10 or more                               | 6,231                  | 0.2            |

The program is administered through regional offices situated in the capital city of each province. Field welfare personnel maintain close liaison with both private and public agencies in the child care field. The department is therefore immediately aware of misuse of allowances and of cases where the parent is not using, or is incapable of using, allowances for the care and maintenance of the child.

Detailed statistics of cost and coverage, by province, are presented in the accompanying tables.

## YOUTH ALLOWANCES

During the fiscal year 1966-67, the second full year of operation of the Youth Allowances program, total expenditures amounted to \$47,395,633, exclusive of the cost of Schooling Allowances in the Province of Quebec. In March, 1967, payments were made on behalf of 412,121 children.

The Youth Allowances program, implemented in September, 1964, at the same time as a program of university loans, was designed to encourage Canadian students to attain higher educational qualifications, and to assist their parents in keeping them in school. The allowance of \$10 per month is paid for any child of 16 or 17 years of age who resides in Canada, is maintained by a parent, and is in attendance at school or is unable to attend because of medically certified physical or mental infirmity. The Province of Quebec, having instituted its own Schooling Allowances program three years before the federal program, Youth Allowances are not paid in that province. Instead, Quebec receives a tax abatement compensation.

The administration of Youth Allowances is handled through the Family Allowances and Old Age Security regional offices in the nine other provinces. Applications originate at the regional office where they are prepared from the Family Allowances records, and are sent to the parents as the children approach the age of sixteen. School attendance is certified by school officials. During the school year, school principals are asked to report drop-outs to the regional offices. Payment, except for the disabled child, is suspended in June and reinstated in September, for July and August, if the child returns to school. The payment of \$30 in September is timely for use in providing books and clothing for the new school year.

The accompanying table shows, for each province, statistics of cost and coverage for the year 1966-67.



## FAMILY ASSISTANCE

Family Assistance is paid on behalf of children of immigrants or returning Canadians who, during the first year of residence in Canada, are not eligible for Family Allowances. The same terms and conditions of eligibility as for Family Allowances are otherwise applicable.

This program has been administered by the Family Allowances and Old Age Security Directorate since July 1, 1962. Prior to that date, it was the responsibility of the Department of Citizenship and Immigration.

The total payment of Family Assistance for the year 1966-67 was \$3,757,499. In March, 1967, 23,675 families received this assistance on behalf of \$47,722 children.

The following table shows, for each province, the total yearly payments, and the number of children and families in pay in March, 1967.

| <u>Province</u>       | <u>Total<br/>Payment<br/>1966-67</u> | <u>Children<br/>in pay<br/>March 1967</u> | <u>Families<br/>in pay<br/>March 1967</u> |
|-----------------------|--------------------------------------|-------------------------------------------|-------------------------------------------|
| Newfoundland          | \$ 18,824                            | 259                                       | 122                                       |
| Prince Edward Island  | 2,766                                | 32                                        | 18                                        |
| Nova Scotia           | 40,904                               | 497                                       | 217                                       |
| New Brunswick         | 33,590                               | 380                                       | 170                                       |
| Quebec                | 612,712                              | 7,854                                     | 4,149                                     |
| Ontario               | 2,138,837                            | 27,441                                    | 13,640                                    |
| Manitoba              | 108,208                              | 1,476                                     | 690                                       |
| Saskatchewan          | 66,628                               | 813                                       | 380                                       |
| Alberta               | 221,052                              | 2,754                                     | 1,298                                     |
| British Columbia      | 510,594                              | 6,158                                     | 2,969                                     |
| Northwest Territories | 1,812                                | 28                                        | 11                                        |
| Yukon                 | 1,572                                | 30                                        | 11                                        |
| <hr/>                 |                                      |                                           |                                           |
| National              | \$3,757,499                          | 47,722                                    | 23,675                                    |
| <hr/>                 |                                      |                                           |                                           |

TABLE 19

COMPARATIVE STATEMENT OF FAMILY ALLOWANCES PAYMENTS  
BETWEEN MONTH OF MARCH 1966 AND MONTH OF MARCH 1967

| Province              | Month of March 1966       |                                    |                                    |                | Month of March 1967       |                                    |                                    |                |
|-----------------------|---------------------------|------------------------------------|------------------------------------|----------------|---------------------------|------------------------------------|------------------------------------|----------------|
|                       | <u>Families Receiving</u> |                                    | Number of<br>Children<br>Receiving | Amount<br>Paid | <u>Families Receiving</u> |                                    | Number of<br>Children<br>Receiving | Amount<br>Paid |
|                       | Number                    | Average<br>Allow.<br>per<br>Family |                                    |                | Number                    | Average<br>Allow.<br>per<br>Family |                                    |                |
| Newfoundland          | 69,346                    | \$20.40                            | 210,512                            | \$ 1,412,838   | 70,435                    | \$20.08                            | 210,082                            | \$1,412,717    |
| Prince Edward Island  | 14,054                    | 19.03                              | 39,632                             | 266,774        | 14,099                    | 18.81                              | 39,342                             | 265,286        |
| Nova Scotia           | 104,856                   | 17.18                              | 267,689                            | 1,797,660      | 105,214                   | 17.01                              | 264,998                            | 1,786,264      |
| New Brunswick         | 82,851                    | 19.05                              | 233,724                            | 1,573,540      | 82,929                    | 18.76                              | 229,798                            | 1,550,221      |
| Quebec                | 792,955                   | 17.38                              | 2,043,428                          | 13,744,144     | 805,315                   | 17.10                              | 2,034,966                          | 13,738,232     |
| Ontario               | 983,502                   | 15.61                              | 2,284,059                          | 15,300,594     | 1,007,038                 | 15.48                              | 2,308,919                          | 15,521,803     |
| Manitoba              | 132,148                   | 16.30                              | 321,747                            | 2,151,253      | 131,011                   | 16.26                              | 315,166                            | 2,126,125      |
| Saskatchewan          | 131,266                   | 17.11                              | 332,952                            | 2,242,379      | 130,876                   | 17.05                              | 330,015                            | 2,226,110      |
| Alberta               | 213,489                   | 16.58                              | 525,859                            | 3,529,201      | 216,086                   | 16.50                              | 527,411                            | 3,554,116      |
| British Columbia      | 254,871                   | 15.60                              | 589,041                            | 3,964,499      | 264,480                   | 15.50                              | 605,443                            | 4,090,596      |
| Northwest Territories | 4,145                     | 17.76                              | 11,119                             | 72,888         | 4,289                     | 18.51                              | 11,449                             | 78,456         |
| Yukon                 | 2,153                     | 16.15                              | 5,295                              | 34,592         | 2,169                     | 16.52                              | 5,285                              | 35,312         |
| NATIONAL              | 2,785,636                 | \$16.59                            | 6,865,057                          | \$46,090,362   | 2,833,941                 | \$16.42                            | 6,882,874                          | \$46,385,238   |



TABLE 20

NET FAMILY ALLOWANCES PAYMENTS - COMPARISON BY FISCAL YEARS

| Province             | 1955-56       | 1956-57       | 1957-58       | 1958-59       | 1959-60                         | 1960-61            |
|----------------------|---------------|---------------|---------------|---------------|---------------------------------|--------------------|
| Newfoundland         | \$ 12,414,789 | \$ 12,881,415 | \$ 14,131,153 | \$ 15,162,900 | \$ 15,566,372                   | \$ 15,960,416      |
| Prince Edward Island | 2,621,722     | 2,640,585     | 2,824,311     | 2,994,334     | 3,062,692                       | 3,124,017          |
| Nova Scotia          | 17,596,685    | 17,973,392    | 19,400,494    | 20,560,462    | 20,932,794                      | 21,241,829         |
| New Brunswick        | 15,451,544    | 15,779,360    | 17,074,970    | 18,201,518    | 18,588,795                      | 18,877,745         |
| Quebec               | 120,389,838   | 124,368,344   | 136,080,634   | 146,278,435   | 150,462,531                     | 154,185,288        |
| Ontario              | 116,604,314   | 122,539,123   | 136,706,313   | 150,186,253   | 156,681,500                     | 162,610,724        |
| Manitoba             | 19,418,713    | 19,888,717    | 21,520,779    | 23,091,594    | 23,730,765                      | 24,384,595         |
| Saskatchewan         | 21,401,114    | 21,644,971    | 23,241,829    | 24,789,278    | 25,363,936                      | 25,848,509         |
| Alberta              | 26,752,793    | 27,953,311    | 31,029,720    | 34,122,637    | 35,765,854                      | 37,365,329         |
| British Columbia     | 29,097,077    | 31,029,472    | 34,969,036    | 38,409,308    | 39,984,176                      | 41,433,470         |
| N.W.T. & Yukon       | 986,437       | 819,150       | 907,321       | 990,349       | 1,074,944                       | 1,159,725          |
| NATIONAL             | \$382,535,026 | \$397,517,840 | \$437,886,560 | \$474,787,068 | \$491,214,359                   | \$506,191,647      |
| Province             | 1961-62       | 1962-63       | 1963-64       | 1964-65       | 1965-66                         | 1966-67            |
| Newfoundland         | \$ 16,336,849 | \$ 16,562,083 | \$ 16,747,021 | \$ 16,871,056 | \$ 16,945,059                   | \$ 16,960,053      |
| Prince Edward Island | 3,204,881     | 3,259,952     | 3,274,057     | 3,266,459     | 3,231,716                       | 3,190,484          |
| Nova Scotia          | 21,623,655    | 21,838,772    | 21,790,680    | 21,776,091    | 21,636,528                      | 21,507,992         |
| New Brunswick        | 19,222,615    | 19,340,514    | 19,198,184    | 19,069,036    | 18,982,908                      | 18,752,034         |
| Quebec               | 157,712,911   | 160,299,079   | 162,172,423   | 163,888,091   | 164,972,052                     | 165,095,827        |
| Ontario              | 168,442,100   | 172,711,354   | 175,544,729   | 179,056,316   | 182,377,587                     | 185,309,485        |
| Manitoba             | 25,065,334    | 25,523,719    | 25,727,440    | 25,926,570    | 25,925,991                      | 25,651,443         |
| Saskatchewan         | 26,313,109    | 26,539,801    | 26,650,259    | 26,891,288    | 26,988,369                      | 26,870,934         |
| Alberta              | 38,928,125    | 40,315,733    | 41,227,721    | 41,996,327    | 42,345,742                      | 42,563,978         |
| British Columbia     | 42,687,279    | 43,834,184    | 44,712,129    | 45,745,199    | 47,006,572                      | 48,525,782         |
| N.W.T. & Yukon       | 1,244,335     | 1,341,158     | 1,267,581     | 1,088,798     | N.W.T. 897,627<br>Yukon 424,673 | 941,310<br>425,625 |
| NATIONAL             | \$520,781,193 | \$531,566,349 | \$538,312,224 | \$545,775,231 | \$551,734,824                   | \$555,794,947      |

TABLE 21

COMPARATIVE STATEMENT OF YOUTH  
ALLOWANCES PAYMENTS BETWEEN  
MARCH 1966 AND MARCH 1967

NET YOUTH ALLOWANCES PAYMENTS -  
COMPARISON BY FISCAL YEARS

| Province | March 1966            |                | March 1967            |                | Province | 1965-66      |              | 1966-67 |
|----------|-----------------------|----------------|-----------------------|----------------|----------|--------------|--------------|---------|
|          | Number of<br>Children | Amount<br>Paid | Number of<br>Children | Amount<br>Paid |          |              |              |         |
| Nfld.    | 15,121                | \$ 141,031     | 15,684                | \$ 148,555     | Nfld.    | \$ 1,591,901 | \$ 1,686,661 |         |
| P. E. I. | 3,593                 | 34,619         | 3,470                 | 34,082         | P. E. I. | 395,465      | 397,505      |         |
| N. S.    | 23,148                | 220,427        | 23,130                | 222,639        | N. S.    | 2,691,768    | 2,654,186    |         |
| N. B.    | 20,072                | 193,084        | 20,077                | 194,423        | N. B.    | 2,311,244    | 2,300,043    |         |
| Ont.     | 190,706               | 1,870,822      | 194,095               | 1,904,167      | Ont.     | 21,978,399   | 22,491,673   |         |
| Man.     | 28,078                | 272,132        | 27,909                | 270,556        | Man.     | 3,249,490    | 3,242,828    |         |
| Sask.    | 29,699                | 289,515        | 29,804                | 288,756        | Sask.    | 3,414,834    | 3,434,721    |         |
| Alta.    | 42,058                | 414,516        | 43,103                | 424,919        | Alta.    | 4,836,771    | 4,960,783    |         |
| B. C.    | 51,770                | 509,017        | 54,291                | 533,652        | B. C.    | 5,934,292    | 6,159,249    |         |
| N. W. T. | 290                   | 3,048          | 314                   | 3,352          | N. W. T. | 34,176       | 39,340       |         |
| Yukon    | 259                   | 2,606          | 244                   | 2,460          | Yukon    | 30,210       | 28,044       |         |
| NATIONAL | 404,794               | \$3,950,817    | 412,121               | \$4,027,561    | NATIONAL | \$46,468,550 | \$47,395,633 |         |



## OLD AGE SECURITY

In December 1966, the Old Age Security Act was amended to provide for the introduction of a Guaranteed Income Supplement program under which all pensioners would be ensured a minimum monthly income. This minimum was set at \$105 during 1967 and would be subject to escalation in subsequent years in accordance with changes in the Pension Index established under the Canada Pension Plan. Implementation of the Guaranteed Income Supplement program was completed by the end of the fiscal year and represented one of the largest administrative undertakings ever carried out in so short a period.

In accordance with a previous amendment to the Old Age Security Act introduced in May 1965, the pensionable age for recipients was lowered from 69 to 68 years, effective January 1967.

Beginning in January 1967, a number of recipients of Old Age Security who had made contributions to the Canada Pension Plan became eligible for a Retirement Pension under that Plan. Arrangements were made whereby their Old Age Security pension and their Canada Pension Plan benefit were combined into one cheque.

By March 31, 1967, a total of 1,229,561 Canadians were in receipt of the Old Age Security pension. Of these, 505,240 were also receiving the new Guaranteed Income Supplement.

In the fiscal year 1966-67, total payments under the Old Age Security Act amounted to \$1,073,005,708. This included the sum of \$39,597,478 paid out under the Guaranteed Income Supplement program for the first three months of the calendar year 1967.

## THE GUARANTEED INCOME SUPPLEMENT

### Introduction

The initiation of a Guaranteed Income Supplement for the benefit of Old Age Security pensioners who have little or no income was the result of a number of developments.

On February 16, 1965, the Joint Parliamentary Committee on the Canada Pension Plan had recommended "that the Government give consideration to further measures regarding the position of these people who, because they are or soon will be retired, will not be able to make contributions to, or benefit from, the Canada Pension Plan".

Approximately a year later, the Senate Committee on Aging issued its Final Report which recommended "a guaranteed income for all persons in Canada aged 65 and over". In this connection, the Report suggested that, prior to the completion of a study which should be carried out to develop a socially acceptable minimum budget for single persons and couples, the annual income to be guaranteed to such persons be set at the same level as the maximum permitted under Old Age Assistance, namely, \$1,260 for single persons and \$2,220 for married couples. The Report also recommended that the only conditions for eligibility be age, i.e. 65 years, ten years residence in Canada, and net cash income from all sources, including the Old Age Security program and the Canada Pension Plan, below the above-mentioned amounts. To be administered and financed by the federal government, such a program, according to the Report, should embody a procedure under which a simplified income form would be completed annually by applicants and the amount by which the declared income falls short of the established minimum in any year constitute the benefit for the next year.

Following examination of this Report by the Government, the Minister of National Health and Welfare, the Honourable Allan J. MacEachen, announced to the House of Commons on July 14, 1966 that:

"We propose to introduce a program that will guarantee a minimum monthly income of \$105 to Old Age Security recipients. The details of such an income guarantee program are now being considered. The total payments which will be required under this program will, of course, decrease over the years as the Canada and Quebec Pension Plans come into effect and pay increasing benefits.

The program is being provided with these two Plans in mind and is specifically designed for those people who are not and will not, because of age, be able to take advantage of the contributory pension plans. This is in line with the recommendations of the special Joint Committee. Because it is an income guarantee program and because of the increasing benefits that will be available under the Canada and Quebec Pension Plans, the burden on the federal Treasury will be almost entirely a transitional one.

By using the contemporary income guaranteed formula rather than the flat-rate increase, it is felt that income support can be provided at a higher level for a given outlay of funds. Through this income guarantee program, the needs of the older citizen can be more adequately met in a way that is financially responsible and least burdensome on the Treasury".

Departmental study of the matter was carried out by a special committee under Chairmanship of the Deputy Minister of National Welfare and included representatives from the directorates of Income Security, Welfare Assistance and Services, Research and Statistics, the Legal Division and the Chief Treasury Officer of the Office of the Comptroller of the Treasury. The committee consulted with officials of the Departments of Finance and National Revenue in working out a detailed proposal for consideration by the Minister.



This proposal was then referred to a special interdepartmental committee consisting of representatives from the Privy Council office, the Comptroller of the Treasury, the Canadian Pension Commission and the War Veterans Allowance Board, as well as the Departments of National Health and Welfare, National Revenue, Finance, Justice, Veterans Affairs and Indian Affairs and Northern Development. Following the consideration of various comments and suggestions from the interdepartmental committee, the Minister of National Health and Welfare put forward a specific plan for consideration by his Colleagues.

On December 5, 1966, Bill C-251, an Act to amend the Old Age Security Act so as to provide for a Guaranteed Income Supplement, was introduced in the House of Commons. Consideration of the legislation by the House was completed by December 20, 1966, and following its passage by the Senate, the measure received Royal Assent on December 21, 1966.

Because of the complex nature of the legislation, a period of time was required to organize the administrative processes essential to the examination of applications and the issuance of payments to beneficiaries. This involved the printing and mailing of an informational booklet and application forms, recruitment and training of additional staff, acquisition of further space for Old Age Security regional offices, and the organizing of special interviewing facilities for those elderly persons who request assistance or information regarding applications and benefits. Cooperative arrangements were also worked out with the Canada Pension Plan Administration whereby its District and Local Offices would provide assistance to pensioners making application for the Guaranteed Income Supplement. In addition, a public educational program was carried out involving advertisements in the various news media.

By mid-February, 1967, application forms had been mailed to over 1,200,000 Old Age Security pensioners. Each pensioner received, along with the application form, a booklet containing full instructions regarding the completion of the form as well as detailed information concerning provisions of the program. In March 1967, the first Old Age Security pension cheques embodying the Supplement were mailed to 505,240 pensioners. Of these, 328,927 received the full monthly amount of \$30 with the remainder receiving partial monthly Supplements.

It has been estimated that approximately 800,000 pensioners will be receiving full or partial benefits under the new program by March 31, 1968, and that expenditures on Guaranteed Income Supplement payments in the fiscal year 1967-68 will amount to between \$235 - \$240 million.

Payment of the Old Age Security pension and the Guaranteed Income Supplement is made in one monthly cheque. Where the recipient is also entitled to a Canada Pension Plan Retirement Pension, all three payments are included in the same cheque.

#### Coverage

The Guaranteed Income Supplement program covers all Old Age Security pensioners in Canada but excludes those pensioners who are

permanently absent from the country. Such pensioners are excluded because of the problems involved in administering a guaranteed income program internationally. It would have been extremely difficult, if not impossible, to be fully informed of the income tax laws and regulations used in the many countries in which pensioners now reside and will reside in the future. On the other hand, there did not seem to be any reason why the Supplement should not be payable for temporary absences. Accordingly, it is payable for the month of departure and for six months thereafter. Subsequently, payment of the Supplement is suspended until the month the pensioner returns to Canada. It is then reinstated provided, of course, that the recipient is still eligible under the program.

### Transitional Aspect

The primary goal of the Guaranteed Income Supplement is to provide income support for current and future Old Age Security pensioners and their spouses who, by reason of age or lack of work experience, are or will be unable to benefit substantially from the Canada or Quebec Pension Plans. Accordingly, the program is limited to persons who were 56 years of age and older in 1966 -- the year in which the Canada and Quebec Pension Plans came into operation. Persons younger than those in this age group have the opportunity of earning the full Retirement Pensions provided under the contributory pension plans. Such Pensions become payable on the completion of ten years of contributions, i. e., in 1976. Contributors to the Canada or Quebec Pension Plans who reach the pensionable age before 1976, are entitled to Retirement Pensions but at less than the full rates.

### Income Concept

The determination of the appropriate concept of income was fundamental to the Guaranteed Income Supplement program. It involved not only the definition of income but also the treatment of retroactive and partial year payments of the Old Age Security pension, the use of individual or individual and family incomes, the specification of income limits, and the use of past or current estimates of income. These matters are discussed in the following paragraphs.

Despite certain exclusions, such as income from social assistance payments, unemployment insurance benefits, some types of retirement pensions and workmen's compensation, the Income Tax concept of income was felt to be sufficiently broad to give a high degree of equity among Old Age Security pensioners who would be eligible for the Supplement.

For purposes of determining the amount of the Supplement, a person's Old Age Security pension is excluded from his income. Such exclusion was considered necessary in view of the retroactive and partial year payments provided for under the Old Age Security Act. On the one hand, because Old Age Security payments can now be made retroactive for up to 12 months for people who do not claim the pension when they are entitled to do so, it is possible for a person to receive up to \$1,800 in one year as his Old Age Security pension. As a consequence, if these retroactive payments were included as income, certain pensioners could be disqualified from receiving



the Supplement in one year or could receive only a partial Supplement in the following year. On the other hand, a person may first become eligible for an Old Age Security pension part way through a year and therefore receive much less than \$900 during the calendar year. Obviously, if Old Age Security pensions were considered as income for Supplement purposes, it would be impossible to provide equitable treatment as between persons in the above circumstances.

In determining the Supplement, individual income is used for single pensioners and the income of both spouses for married couples. In the case of a married person, his or her income is taken as one-half of the combined income of the couple. This approach was considered a more equitable basis than would have occurred if individual income had been taken into account exclusively.

With respect to income limits, the program encourages private savings and retirement arrangements by disregarding a certain amount of outside income in calculating the amount of the Supplement to be paid. In other words, people with modest incomes apart from the Old Age Security pension can claim partial Supplements. This is accomplished by providing for a reduction in the monthly Supplement of one dollar for every two dollars of average income from sources other than the Old Age Security pension. Accordingly, only those with extra incomes of more than twice the maximum Supplement are not entitled to any Supplement. In 1967, for example, full or partial Supplements were payable to pensioners in the following classes whose incomes including the Old Age Security pension during 1966 were less than the following amounts:

- \$1,620 for a pensioner classed as single.
- \$3,240 for a married couple where both spouses are pensioners.
- \$3,240 for a married couple where only one spouse is a pensioner.

It is clear from the above that a married pensioner whose spouse is not receiving the Old Age Security pension has a higher income limit when the pension is excluded than pensioners in the other two categories. On the other hand, he has greater financial needs than a single person and, although he is allowed a partial Supplement on a higher limit of family income, the annual Supplement payments could not exceed \$360 in 1967. A married person with no income other than the Old Age Security pension whose spouse likewise has no income would be guaranteed an annual income of \$1,260 in 1967. The married couple would have a guaranteed annual income of \$2,520.

In determining the amount of the Supplement, the program provides for the use of a pensioner's income for the previous rather than for the benefit year. This approach has a number of advantages, namely: a) it does not require a pensioner to attempt to estimate his income for the year ahead; b) use of actual income figures greatly reduces the need for a system of recoveries of overpayments; c) actual income items can be checked for accuracy much sooner using Income Tax and other sources of information. The disadvantage in basing the Supplement on the previous year's income is that the payment may not reflect current needs of the recipient. However,

the majority of pensioners are retired and have a relatively stable income. But for those pensioners who have had a change in income status which would adversely affect them, the program provides two options whereby the current year's estimated income may be used for persons who retire in the benefit year or in the year preceding the benefit year.

### Retirement Options

Special options are made for persons who suffer a drop in income following retirement from employment or self-employment. If these options were not included in the program, an individual could be precluded from receiving a Supplement for periods of up to twenty-three months because of high pre-retirement employment or self-employment income.

The first option applies to persons who have retired in the year preceding the benefit year. Under this option, estimated income from sources such as employment, self-employment and retirement pensions in the current year may be substituted for actual income from these sources in the preceding year and the Supplement calculated therefrom.

The second option applies to a person who retires in the course of a benefit year. Under this option, employment income received prior to retirement can be disregarded and income received since retirement substituted for the previous year's income. At the same time, the amount of any benefit under the Canada or Quebec Pension Plans, private pension plan, or post-retirement earnings that a person would receive in the months of the benefit year following retirement may be substituted for any income which he may have received from these sources in the preceding year in order to arrive at the total income on which his Supplement is based.

At March 31, 1967, the first option had been elected by 9,863 pensioners and the second by 2,374.

### Amount of Supplement

Under the legislation, the maximum amount of the Supplement was fixed at \$30 a month for 1967 and thereafter at 40 percent of the amount of the Old Age Security pension. The maximum is reduced by one dollar for every two dollars of any monthly base income as determined under the Act. In this way, Old Age Security pensioners were guaranteed a monthly minimum income of \$105 in 1967. Since the Supplement is set as a percentage of the Old Age Security pension, it will automatically be escalated whenever the basic pension is adjusted by an increase in the Pension Index established under the Canada Pension Plan. The Pension Index is based on the Consumer Price Index.

In each instance, the Supplement is based on the pensioner's monthly base income which is one-twelfth of his annual income for the preceding year. This is the amount calculated in accordance with provisions of the Income Tax Act minus his Old Age Security pension or Supplement or any similar provincial payment minus any Canada or Quebec Pension Plan benefit received by him in the previous year plus any such payment received in the benefit year.



Income for a married pensioner whose spouse is also a pensioner is taken to be one-half the aggregate of the incomes of that pensioner and his spouse computed as in the preceding paragraph. Income for a married pensioner whose spouse is not a pensioner is one-half the aggregate income of that pensioner and his spouse computed as above minus six times the monthly Old Age Security pension that may be paid to the pensioner.

### Interim Supplements

The program provides for the payment of Interim Supplements for up to four months in instances where the actual amount of the Supplement cannot be fixed at the time the Supplement would otherwise be approved. This provision is designed primarily to avoid any gap in payments for pensioners who have been receiving the Supplement in a particular year and who signify that they will be re-applying for the Supplement in the following year. Because the statement of income will be made each January on which Supplements beginning in January will be calculated, it will be almost impossible to receive, examine and process the statement and arrange for the new amount of the Supplement to be paid in that month. Payment of an Interim Supplement in these circumstances will enable pensioners to continue receiving a benefit until their renewal application has been processed and put into pay. Recovery will be made from the person's Supplement or Old Age Security pension of any excess amount which may be paid as an Interim Supplement. Conversely, where the Interim Supplement proves to be less than the new amount to which a pensioner is entitled, the person will be reimbursed for the difference.

### Married Applicants

As indicated in a previous section, the Guaranteed Income Supplement program takes into account the income of both spouses in determining the Supplement to be paid to married pensioners. Accordingly, the legislation sets out how marital status is to be treated under the program.

Marital status is determined as at December 31 of the year preceding the benefit year and persons are considered to be married for purposes of the program whether or not this status changes following this date, subject to the provisions mentioned below.

Payments will not be made to married couples unless both spouses submit income returns. In order to prevent undue hardship when a statement of income from one spouse is not obtainable, the other spouse may be deemed to be single for purposes of determining income. Also, where marital status changes following December 31 of the preceding year, a special provision permits a person, on application, to be deemed either married or single in the preceding year.

### Appeals

The legislation now provides for appeal procedures not only with respect to entitlement to the Guaranteed Income Supplement but also in relation to eligibility for the Old Age Security pension. There had previously been no such provisions regarding the basic pension. In the case of the

denial of a Supplement or a pension or a question concerning the amount of a Supplement, an appeal may be made to a special tribunal whose decision is final and binding. Appeals involving decisions as to the amount of sources of income of an applicant may be made to the Tax Appeal Board whose decision is final and binding. Up to March 31, 1967, when the amended legislation had been in effect for three months, no appeals had been made.

## Financing

Payments under the Guaranteed Income Supplement program are made from the Old Age Security Fund. In conjunction with the introduction of the Guaranteed Income Supplement program, the ceiling on the amount of Old Age Security Tax payable on personal income was raised from \$120 to \$240 effective January 1, 1967.

## OLD AGE SECURITY PENSIONS

When the Old Age Security Act came into effect in January 1952, the pensionable age was 70 years. In May 1965, the Act was amended to provide that the pension would be available at age 65 in 1970 through successive annual reductions in the pensionable age beginning in January 1966. Thus for the calendar year 1967, the pension is payable at age 68.

Prior to the coming into effect of this amendment, the usual net yearly increase in the number of recipients had been approximately 20,000. In 1965-66, the increase amounted to 112,194 pensioners and in 1966-67, to 123,785. The rate of increase in the past two fiscal years is likely to continue through 1968 and 1969 but should be considerably reduced after 1970 when the Old Age Security pension will be payable to all eligible persons at age 65.

Beginning in January 1967, a number of Old Age Security pensioners who had made contributions to the Canada Pension Plan became eligible for a Retirement Pension under that Plan. By integrating the payment procedures with respect to these measures, the pensioners concerned now receive one monthly cheque combining their Old Age Security pension and their Canada Pension Plan benefit. Where such a pensioner is also eligible for the Guaranteed Income Supplement, this payment is included in the same cheque.

In March 1967, there were 1,229,561 persons 68 years of age and over in receipt of the \$75 per month pension. Of this number 13,064 pensioners were residing outside Canada.

The total amount paid to Old Age Security recipients during 1966-67 was \$1,073,005,708. This included the sum of \$39,597,478 paid since the beginning of the calendar year 1967 to 505,240 pensioners under the Guaranteed Income Supplement program.

The Old Age Security Act and Regulations are administered through regional offices situated in the capital city of each province.

Detailed statistics by province, presented in the accompanying tables, provide information on program costs and coverage during 1966-67.



TABLE 22

COMPARATIVE STATEMENT OF OLD AGE SECURITY PAYMENTS  
BETWEEN MONTH OF MARCH 1966 AND MONTH OF MARCH 1967

| Province              | Number of Pensioners in Pay |                   | Monthly Payments  |                     |
|-----------------------|-----------------------------|-------------------|-------------------|---------------------|
|                       | <u>March 1966</u>           | <u>March 1967</u> | <u>March 1966</u> | <u>March 1967 *</u> |
| Newfoundland          | 21,184                      | 23,733            | \$ 1,606,132      | \$ 3,282,534        |
| Prince Edward Island  | 8,809                       | 9,665             | 663,079           | 1,251,547           |
| Nova Scotia           | 49,801                      | 54,690            | 3,778,174         | 6,589,889           |
| New Brunswick         | 36,852                      | 40,565            | 2,788,284         | 4,858,826           |
| Quebec                | 242,865                     | 275,515           | 18,319,578        | 31,752,979          |
| Ontario               | 402,997                     | 451,069           | 30,363,683        | 43,552,410          |
| Manitoba              | 65,758                      | 71,471            | 4,958,998         | 8,108,704           |
| Saskatchewan          | 66,638                      | 71,892            | 5,037,332         | 7,956,042           |
| Alberta               | 74,514                      | 82,145            | 5,653,746         | 9,090,772           |
| British Columbia      | 135,556                     | 147,930           | 10,224,602        | 15,524,284          |
| Northwest Territories | 506                         | 558               | 38,027            | 44,441              |
| Yukon                 | 296                         | 328               | 22,115            | 25,978              |
| NATIONAL              | 1,105,776                   | 1,229,561         | \$83,453,750      | \$132,038,406       |

\* Includes payments of the Guaranteed Income Supplement from January to March, 1967 inclusive.

TABLE 23

## NET OLD AGE SECURITY PAYMENTS - COMPARISON BY FISCAL YEARS

| Province             | 1961-62       | 1962-63       | 1963-64       | 1964-65       | 1965-66                           | 1966-67 *          |
|----------------------|---------------|---------------|---------------|---------------|-----------------------------------|--------------------|
| Newfoundland         | \$ 11,947,626 | \$ 14,013,832 | \$ 15,376,636 | \$ 16,811,166 | \$ 17,586,159                     | \$ 21,227,171      |
| Prince Edward Island | 5,151,999     | 5,962,922     | 6,493,258     | 7,118,615     | 7,447,170                         | 8,729,035          |
| Nova Scotia          | 28,895,584    | 33,817,492    | 37,063,710    | 40,399,804    | 42,048,599                        | 48,997,738         |
| New Brunswick        | 21,291,111    | 24,858,331    | 27,247,749    | 29,780,719    | 30,994,768                        | 36,154,088         |
| Quebec               | 131,711,372   | 155,359,915   | 171,996,794   | 189,682,327   | 201,031,152                       | 239,765,491        |
| Ontario              | 226,065,413   | 265,742,644   | 292,547,198   | 321,064,620   | 337,194,513                       | 387,389,692        |
| Manitoba             | 38,085,361    | 44,617,405    | 48,874,928    | 53,360,235    | 55,494,509                        | 63,498,352         |
| Saskatchewan         | 39,621,029    | 46,334,646    | 50,751,907    | 55,063,268    | 56,755,191                        | 64,024,451         |
| Alberta              | 42,276,129    | 49,787,140    | 54,835,096    | 60,052,938    | 62,793,976                        | 72,388,084         |
| British Columbia     | 79,622,315    | 93,362,860    | 102,639,328   | 111,327,361   | 115,292,880                       | 130,083,574        |
| Yukon & N. W. T.     | 439,865       | 524,445       | 564,696       | 633,415       | N. W. T. 405,690<br>Yukon 254,880 | 464,763<br>283,269 |
| NATIONAL             | \$625,107,804 | \$734,381,632 | \$808,391,300 | \$885,294,468 | \$927,299,487                     | \$1,073,005,708    |

\* Includes payments of the Guaranteed Income Supplement from January to March, 1967 inclusive.



## CANADA ASSISTANCE PLAN

The Canada Assistance Plan was enacted by Parliament on July 15, 1966, to have effect from April 1, 1966. The Plan is a comprehensive measure for sharing the cost of public assistance and welfare services with the provinces and in municipalities with a view to encouraging the provision of adequate assistance and the improvement of services that have a preventive and rehabilitative emphasis. The rate of contribution is 50 per cent of shareable costs.

The broad proposals incorporated in the Plan were worked out in close collaboration with the provinces. This included federal-provincial conferences of Ministers of Welfare, chaired by the Minister of National Health and Welfare, in May 1964, April 1965, and January 1966, and continuing consultation at the official level.

A basic feature of the Plan is that it provides for the development of integrated comprehensive general assistance programs. Thus, it enables the provinces to meet the varying requirements of different groups of persons within a single program and administrative framework. Where there are now four federal-provincial cost sharing programs -- Old Age Assistance, Blind Persons Allowances, Disabled Persons Allowances and Unemployment Assistance, the Plan makes it possible for the provinces to combine these, at their option, into a single program. Persons now in receipt of one of the so-called categorical allowances, such as old age assistance, may be transferred to the new program if they will receive comparable or improved benefits.

Another significant feature of the Plan is that it provides for payment of assistance on the basis of need, that is, on the basis of an assessment of the budgetary requirements of individuals and families as well as their income and resources. This is in contrast to the means test under which only income and assets are considered within defined benefit and income ceilings. No upper limit is placed on the benefits for which federal sharing is available under the Plan. The Plan covers both employable and unemployable persons in need, including those who require care in homes for special care such as homes for the aged and nursing homes.

The Canada Assistance Plan extends federal cost sharing to a number of areas for which federal contributions were not previously available. One such area is allowances to needy mothers who were excluded from sharing under the Unemployment Assistance Act. The Plan also extends federal sharing to a comprehensive range of health care services to persons in need. These may include medical and surgical services, nursing, dental and optical care, including dentures and eye glasses, and drugs and prosthetic appliances.

Another new area of federal sharing is in the cost of maintaining children in care. These include children who have been placed in foster homes or who require care in various kinds of child caring institutions.





The Canada Assistance Plan is designed to help people with limited or no earning ability to function in the Canadian economy by providing various forms of financial assistance.



Major emphasis is placed in the Plan on the development and improvement of welfare services that have as their object the lessening, removal or prevention of the causes and effects of poverty, child neglect and dependence on public assistance. To this end, contributions are provided under the Plan for provincial and municipal expenditures for welfare services in excess of those incurred during the fiscal year 1964-65. The services covered include rehabilitation services, counselling and casework, adoption services, homemaker and day care services, and community development. Costs of extending and strengthening the administration of public assistance programs are also covered along with outlays for staff training, consultation, research and evaluation, the major items of shared expense being salaries and travel costs. Contributions may be made for services provided through provincial departments of welfare, municipalities and provincially supported and approved voluntary agencies.

Federal-provincial agreements are authorized under Part II of the Plan to provide for the extension of provincial welfare programs to Indians living on reserves or in unorganized territories, with provision made for a higher rate of federal contribution. Major programs covered include public assistance, child care, and welfare services.

Provision is also made in the Plan for special programs to help improve the motivation and work capacity of public assistance recipients who have not been able to take full advantage of training opportunities, or who have unusual difficulty in securing or retaining employment.

The major efforts of the Canada Assistance Plan Division during the year were devoted to the development of regulations and agreements and to related consultation with the provinces. Regulations under the Plan were adopted on January 26, 1967, under P.C. 1967-143. Agreements were forwarded to the provinces for signature in February and by the end of the year eight provinces had entered agreements. They were Newfoundland, Nova Scotia, Prince Edward Island, Ontario, Manitoba, Saskatchewan, Alberta and British Columbia.

The Plan provides for advances to be paid on the basis of provincial and municipal expenditures, with final contributions being determined on an annual basis. Because agreements were signed at the end of the fiscal year, very few claims were received from provinces. Federal payments, however, may be made retroactively to April 1, 1966, and thus claims covering this period will be payable during 1967-68. By the end of the year the following advances had been paid under the Plan:

|              |              |
|--------------|--------------|
| Nova Scotia  | \$ 448,674   |
| Ontario      | 6,931,274    |
| Saskatchewan | 3,115,664    |
|              | <hr/>        |
| Total        | \$10,495,612 |

## UNEMPLOYMENT ASSISTANCE

The Unemployment Assistance Act, as passed in 1956 and amended in 1957, provides that the federal government may enter into an agreement with any province to contribute 50 per cent of the costs of assistance paid by the province and its municipalities to persons and their dependents who are unemployed and in need. All provinces and territories have agreements under the Act.

Under the Unemployment Assistance Agreements the federal government continued during 1966-67 to share in general assistance payments under provincial programs variously referred to as social assistance, social allowances, social aid, public assistance and general welfare assistance. The agreements provide for provinces and their municipalities to set the rates of assistance and conditions of eligibility on which federal reimbursement is based.

Payments to both employable and unemployable persons are shared. The latter group, which constitutes the majority of the caseload, includes persons with varying degrees of disability, those unable to work because of family responsibilities, and residents of homes for special care, including homes for the aged and nursing homes. Through an amendment to the Unemployment Assistance Act and Agreement incorporated in the Canada Assistance Plan, cost sharing under the program was extended to allowances for needy mothers, with effect from 1 April, 1966.

The federal government also shares under this program in additional assistance paid to needy persons in receipt of old age security pensions, old age assistance, blind and disabled persons allowances and unemployment insurance benefits, where the amount of assistance paid is determined through an assessment of the recipient's basic requirements as well as financial resources.

The total payments attributable to this program for the year were \$169,833,657. This represents a 39.4 per cent increase from the previous year's total of \$121,856,174. Of this amount, however, \$26,562,595 was received by Quebec under the contracting-out provisions of the Established Programs (Interim Arrangements) Act. This reduced the direct payments under the Unemployment Assistance Act for the year to \$143,271,062.

The explanation of the increase in expenditures lies largely in the extension of sharing to allowances for needy mothers and in the improvement of provincial programs, particularly increases in rates of assistance. The average number of recipients per month during 1966-67 was 781,440 an increase of 15.5 per cent from the average of 676,611 for 1965-66. A major portion of the increase resulted from the extension of the program to cover allowances for needy mothers.

It should be noted that under the Unemployment Assistance Act sharing does not extend to the costs of administration, funeral expenses and expenditures for medical, hospital, nursing, dental and optical care and for drugs and dressings.



The Canada Assistance Plan, which was enacted by Parliament during the year, includes provision for contributions to the cost of assistance for persons in need. It is anticipated that the major portion of the cost now covered under the unemployment assistance program will be covered under the Plan in 1967-68.

TABLE 24

FEDERAL-PROVINCIAL UNEMPLOYMENT ASSISTANCE AGREEMENTS: FEDERAL SHARE OF ASSISTANCE\*  
AND NUMBER OF PERSONS\*\* ASSISTED, BY PROVINCE, APRIL, JULY, AND OCTOBER, 1966 AND JANUARY, 1967

|                       | APRIL 1966                        |                                  |                                   | JULY 1966                        |                                   |                                  | OCTOBER 1966                      |                                  |                                   | JANUARY 1967                     |                                   |                                  |
|-----------------------|-----------------------------------|----------------------------------|-----------------------------------|----------------------------------|-----------------------------------|----------------------------------|-----------------------------------|----------------------------------|-----------------------------------|----------------------------------|-----------------------------------|----------------------------------|
|                       | Federal<br>Share Of<br>Assistance | Number Of<br>Persons<br>Assisted | Federal<br>Share Of<br>Assistance | Number Of<br>Persons<br>Assisted | Federal<br>Share Of<br>Assistance | Number Of<br>Persons<br>Assisted | Federal<br>Share Of<br>Assistance | Number Of<br>Persons<br>Assisted | Federal<br>Share Of<br>Assistance | Number Of<br>Persons<br>Assisted | Federal<br>Share Of<br>Assistance | Number Of<br>Persons<br>Assisted |
|                       | \$                                |                                  | \$                                |                                  | \$                                |                                  | \$                                |                                  | \$                                |                                  | \$                                |                                  |
| Newfoundland          | 671,991                           | 58,046                           | 786,425                           | 55,915                           | 905,464                           | 66,235                           | 905,124                           | 68,848                           |                                   |                                  |                                   |                                  |
| Prince Edward Island  | 37,435                            | 2,741                            | 49,733                            | 3,612                            | 53,840                            | 3,716                            | 59,979                            | 4,468                            |                                   |                                  |                                   |                                  |
| Nova Scotia           | 268,922                           | 25,770                           | 272,386                           | 24,301                           | 279,467                           | 19,976                           | Nil                               | Nil                              |                                   |                                  |                                   |                                  |
| New Brunswick         | 224,582                           | 27,474                           | 201,238                           | 33,435                           | 217,323                           | 25,351                           | Nil                               | Nil                              |                                   |                                  |                                   |                                  |
| Quebec***             | 5,269,164                         | 275,580                          | 5,250,750                         | 264,853                          | 5,585,577                         | 348,291                          | 5,909,415                         | 362,573                          |                                   |                                  |                                   |                                  |
| Ontario               | 3,299,024                         | 163,326                          | 3,260,465                         | 155,498                          | 3,492,952                         | 157,266                          | 3,226,385                         | 163,920                          |                                   |                                  |                                   |                                  |
| Manitoba              | 616,595                           | 44,115                           | 585,695                           | 28,487                           | 639,573                           | 29,232                           | 589,041                           | 26,852                           |                                   |                                  |                                   |                                  |
| Saskatchewan          | 576,314                           | 37,572                           | 655,627                           | 35,725                           | 747,978                           | 39,960                           | 661,531                           | 32,511                           |                                   |                                  |                                   |                                  |
| Alberta               | 1,098,659                         | 62,069                           | 1,101,936                         | 59,882                           | 1,179,669                         | 57,570                           | 1,163,559                         | 58,096                           |                                   |                                  |                                   |                                  |
| British Columbia      | 1,762,250                         | 91,417                           | 1,746,990                         | 89,600                           | 1,824,604                         | 91,189                           | 2,022,859                         | 103,292                          |                                   |                                  |                                   |                                  |
| Yukon Territory       | 6,125                             | 288                              | 6,144                             | 220                              | 7,814                             | 217                              | 9,644                             | 422                              |                                   |                                  |                                   |                                  |
| Northwest Territories | 6,652                             | 1,296                            | 6,209                             | 903                              | 3,864                             | 701                              | 7,286                             | 1,408                            |                                   |                                  |                                   |                                  |
| CANADA                | 13,837,713                        | 789,694                          | 13,923,598                        | 752,431                          | 14,938,125                        | 839,704                          | 14,554,823                        | 822,390                          |                                   |                                  |                                   |                                  |

\* The amounts shown are for the months in which assistance was granted to recipients rather than the months in which the federal share was paid to the provinces.

\*\* Includes dependents.

\*\*\* Includes amounts received by Quebec under the contracting out provisions of the Established Programs (I. A.) Act. These amounts were \$2,144,500 for April, \$2,144,500 for July and October and \$2,318,900 for January, 1967.



TABLE 25

## FEDERAL UNEMPLOYMENT ASSISTANCE PAYMENTS TO PROVINCES

| <u>Province</u>       | <u>Payment</u>   |
|-----------------------|------------------|
| Newfoundland          | \$ 9,947,909.35  |
| Prince Edward Island  | 604,674.68       |
| Nova Scotia           | 3,371,305.44     |
| New Brunswick         | 2,023,323.45     |
| Quebec                | 33,286,897.93    |
| Ontario               | 42,923,298.25    |
| Manitoba              | 7,395,047.54     |
| Saskatchewan          | 7,506,631.19     |
| Alberta               | 13,856,923.34    |
| British Columbia      | 22,200,060.81    |
| Yukon Territory       | 84,312.78        |
| Northwest Territories | 70,677.46        |
| CANADA                | \$143,271,062.22 |

## OLD AGE ASSISTANCE

The Old Age Assistance Act provides for federal sharing, under agreements, of 50 per cent of the amounts paid by the provinces for assistance to persons who have attained the age of 65 years but who are not yet eligible for Old Age Security. The provinces pay assistance to recipients under the authority of provincial legislation but in accordance with the provisions of the federal Act.

The Act specifies \$75 a month as the maximum amount in which the Government of Canada may share. The maximum amounts of income, including assistance, allowed by the Act are \$1,260 a year in the case of an unmarried person, \$2,220 a year in the case of a married person, and \$2,580 a year in the case of a married person with a blind spouse. Agreements between the Government of Canada and provincial governments stipulate these amounts.

The number of recipients in all provinces and in the territories on March 31, 1967, was 58,363.

The Old Age Security Act was amended in 1965 to lower the age of eligibility by one year on January 1st of each year from 1966 to 1970, both inclusive. Thus, the age of eligibility for Old Age Security was reduced to 68 years on January 1, 1967 with a consequent reduction in the Old Age Assistance caseload.

Federal expenditures under the Old Age Assistance Act were reduced by the discontinuance of payments to Quebec in accordance with a supplementary agreement between Canada and the province under the Established Programs (Interim Arrangements) Act which came into force April 1, 1965. As a result of this agreement the funds formerly paid to Quebec under the Old Age Assistance Act are received by the province through a tax abatement. The program continues to be administered, however, in accordance with the provisions set out in the Act and Regulations.

For 1966-67, federal payments under the Act to nine provinces and the two territories totalled \$19,750,744. If payments to Quebec had continued during 1966-67, the amount paid to the province by the Government of Canada would have been \$12,291,269.

Under an amendment to the Old Age Assistance Act enacted in July 1966, provinces that have signed agreements under the Canada Assistance Plan may discontinue acceptance of applications for Old Age Assistance and may assist this group under programs for which contributions are made through the Plan. They may also transfer current recipients of Old Age Assistance to a program coming under the Plan if they will qualify for comparable or greater benefits. Both of these steps were taken by Saskatchewan on April 1, 1966.

Federal administration of the Old Age Assistance Act is a responsibility of the Canada Assistance Plan Division, Welfare Assistance and Services Branch, Department of National Health and Welfare.



## ALLOWANCES FOR BLIND PERSONS

The Blind Persons Act provides for federal sharing, under agreements, of 75 per cent of the amounts paid by the provinces for allowances to blind persons 18 years of age and over. The provinces pay allowances to recipients under the authority of provincial legislation but in accordance with the provisions of the federal Act.

The Act specifies \$75 a month as the maximum amount in which the Government of Canada may share. The maximum amounts of income allowed by the Act, including any allowance payable, are \$1,500 a year in the case of an unmarried person without a dependent child or children, \$1,980 a year in the case of an unmarried person with a dependent child or children, \$2,580 a year in the case of a married person and \$2,700 a year in the case of a married person with a blind spouse. Agreements between the Government of Canada and provincial governments stipulate these amounts.

Federal expenditure under the Blind Persons Act was reduced by the discontinuance of payments to Quebec in accordance with a supplementary agreement between Canada and the province under the Established Programs (Interim Arrangements) Act which came into force April 1, 1965. As a result of this agreement the funds formerly paid under the Blind Persons Act to Quebec are received through a tax abatement by the province. The program continues to be administered, however, in accordance with the provisions set out in the Act and Regulations.

For 1966-67, federal payments under the Act to nine provinces and the two territories totalled \$3,377,418. If federal payments to Quebec had continued during 1966-67, the amount paid to the province by the Government of Canada would have been \$1,714,789.

The number of recipients in all provinces and in the territories as at March 31, 1967, was 7,582. This number was reduced from the figure for the previous year as a result of the reduction in the age of eligibility for Old Age Security.

Under an amendment to the Blind Persons Act enacted in July, 1966, provinces that have signed agreements under the Canada Assistance Plan may discontinue acceptance of applications for Blind Persons Allowances and may assist this group under programs for which contributions are made through the Plan. They may also transfer current recipients of blind persons allowances to a program coming under the Plan if they will qualify for comparable or greater benefits. Both of these steps were taken by Saskatchewan on April 1, 1966.

Federal administration of the Blind Persons Act is the responsibility of the Canada Assistance Plan Division, Department of National Health and Welfare. The Medical Rehabilitation Division in the Health Branch is responsible for medical decisions.





Blindness Allowances for which these checker players are eligible help them to maintain a decent standard of living.



## ALLOWANCES FOR DISABLED PERSONS

The Disabled Persons Act provides for federal sharing under agreements, of 50 per cent of the amounts paid by the provinces for allowances to disabled persons age 18 and over. The provinces pay disability allowances to recipients under the authority of provincial legislation but in accordance with the provisions of the federal Act.

The Act specifies \$75 a month as the maximum amount in which the Government of Canada may share. The maximum amounts of income allowed by the Act, including any allowance payable, are \$1,260 a year in the case of an unmarried person, \$2,220 a year in the case of a married person and \$2,580 a year in the case of a married person with a blind spouse. Agreements between the Government of Canada and provincial governments stipulate these amounts.

Federal expenditure under the Disabled Persons Act was reduced during the year by the discontinuance of payments to Quebec in accordance with a supplementary agreement between Canada and the province under the Established Programs (Interim Arrangements) Act which came into force April 1, 1965. As a result of this agreement the funds formerly paid under the Disabled Persons Act to Quebec are being received through a tax abatement to the province. The program continues to be administered, however, in accordance with the provisions set out in the Act and Regulations.

For 1966-67, federal payments under the Act to nine provinces and the two territories totalled \$15,026,379. If payments to Quebec had continued during 1966-67, the amount paid to the province by the Government of Canada would have been \$8,535,524.

The number of recipients in all provinces and in the territories as at March 31, 1967, was 53,863. The number of recipients was reduced during the year by the transfer in cases resulting from the reduction in the age of eligibility for Old Age Security from 69 to 68 years.

Under an amendment to the Disabled Persons Act enacted in July, 1966, provinces that have signed agreements under the Canada Assistance Plan may discontinue acceptance of applications for Disabled Persons Allowances and may assist this group under programs for which contributions are made through the Plan. They may also transfer current recipients of disabled persons allowances to a program coming under the Plan if they will qualify for comparable or greater benefits. Both of these steps were taken by Saskatchewan on April 1, 1966.

Federal administration of the Disabled Persons Act is a responsibility of the Canada Assistance Plan Division, Department of National Health and Welfare. The Medical Rehabilitation Division in the Health Branch provides advisory services on the medical aspects of the program.

TABLE 26

FEDERAL PAYMENTS TOWARDS ASSISTANCE TO THE AGED, BLIND AND DISABLED

| Province                   | Old Age Assistance                  |                 | Blind Persons Allowances            |                | Disabled Persons Allowances         |                 |
|----------------------------|-------------------------------------|-----------------|-------------------------------------|----------------|-------------------------------------|-----------------|
|                            | Number of recipients<br>March, 1967 | Payments        | Number of recipients<br>March, 1967 | Payments       | Number of recipients<br>March, 1967 | Payments        |
| Alberta.....               | 3,617                               | \$ 2,092,388.97 | 412                                 | \$ 284,078.01  | 1,931                               | \$ 859,166.31   |
| British Columbia .....     | 4,074                               | 2,252,115.48    | 484                                 | 336,638.70     | 2,422                               | 1,071,978.08    |
| Manitoba .....             | 2,956                               | 1,611,858.10    | 325                                 | 226,219.36     | 1,547                               | 687,543.04      |
| New Brunswick.....         | 3,033                               | 1,620,147.77    | 589                                 | 407,929.98     | 2,266                               | 1,041,899.67    |
| Newfoundland .....         | 3,110                               | 1,675,756.04    | 438                                 | 292,223.61     | 1,873                               | 833,340.27      |
| Nova Scotia .....          | 3,134                               | 1,667,067.85    | 682                                 | 466,060.73     | 3,522                               | 1,584,060.73    |
| Ontario.....               | 13,279                              | 7,238,583.95    | 1,710                               | 1,081,628.95   | 19,800                              | 8,377,469.09    |
| Prince Edward Island ..... | 712                                 | 390,463.01      | 67                                  | 46,141.65      | 814                                 | 368,991.83      |
| Saskatchewan.....          | 1,496                               | 1,131,452.23    | 272                                 | 204,546.87     | 390                                 | 189,817.37      |
| Northwest Territories..... | 120                                 | 62,084.57       | 38                                  | 28,068.75      | 23                                  | 11,212.45       |
| Yukon Territory.....       | 15                                  | 8,826.35        | 5                                   | 3,881.25       | 2                                   | 900.00          |
| NATIONAL .....             | 35,546                              | \$19,750,744.32 | 5,022                               | \$3,377,417.86 | 34,590                              | \$15,026,378.84 |



## NATIONAL WELFARE GRANTS

Several significant innovations were made in the Welfare Grants program during the year, designed to increase its flexibility and scope as a means of assisting in the development and strengthening of welfare services in Canada. A new provision was added to enable direct non-matching grants to national voluntary welfare agencies for broadly based projects which do not fit into any other provision of the program. As a further contribution to easing the shortage of well qualified personnel in welfare the number of direct scholarship and fellowship awards was doubled. In previous years research project applications had to be received by a fixed cut-off date prior to the beginning of the fiscal year. Applications received after that date could not be given consideration until the following year. Experimental research projects are still subject to a deadline, but exploratory studies and surveys may now be considered at any time during the fiscal year subject to the availability of funds. Demonstration grants, available to the provinces as a means to testing welfare service innovations, previously had to be matched by public funds from within the province. Although such grants continue to be charged against annual allocations to the provinces, matching is no longer required. Only provincial departments are eligible to receive demonstration grants, but, with the approval of the provincial authorities, municipal and private services within the province may participate in such projects.

Directly administered provisions of the program include welfare research, national voluntary welfare agency grants, scholarships, fellowships, and teaching and field instruction grants to Canadian schools of social work.

In addition to demonstration grants described above, the shared cost provisions of the program which are financed out of annual federal allocations to the provinces include general welfare, bursaries, training grants, and staff development grants. Total federal expenditures during the fiscal year amounted to \$1,278,083.

Of the twenty-three welfare research projects assisted, seven were continued from the previous fiscal year. Seven went to national voluntary welfare agencies, six to universities, (including schools of social work) five to provincial departments of welfare and five to local voluntary agencies. Among the continued projects were a study of relationships between the voluntary agency and government in English speaking Canada by the University of Toronto School of Social Work, the evaluation of a multi-service project in Winnipeg by the Manitoba Department of Welfare, two studies of a major area development project in Vancouver by the Community Chest and Councils of that city and an examination of the school performance of children in public assistance families by the Canadian Welfare Council. Among the new projects were a survey of Cape Breton welfare services sponsored by the Nova Scotia Department of Welfare to determine the need for a County Social Planning Council and a study, by the National Committee of Canadian Schools of Social Work, of its program needs. A contribution was made, through the Manitoba Department of Social Welfare, to a needs and resources study of Metropolitan Winnipeg and to several projects sponsored by the Canadian



Welfare Council and its various divisions. Among the latter are a study of "employable" unemployed receiving public assistance in three Canadian cities in an effort to determine the basis of their inability to work and the effects on them of receipt of assistance, and a national survey of day care services in Canada. The last mentioned is going forward with the help of an advisory committee representing the concerns of three federal government departments in this area - Labour, Manpower and Immigration and National Health and Welfare.

There was a strong response from the field to the new provision for project grants to national voluntary welfare agencies. A total of eleven grants were made to seven different organizations. Many of these reflected an over-riding concern with problems of manpower. The Association of Universities and Colleges of Canada sponsored a national conference on manpower needs in social welfare as a step toward the more effective co-ordination of educational, governmental and social agency resources in this area. The Community Funds and Councils Division of the Canadian Welfare Council sponsored a training institute for beginner staff and a management development seminar which involved a number of local community funds. A grant was made to the Young Women's Christian Association of Canada for a national consultation on the development and effective use of personnel. The National Committee of Canadian Schools of Social Work was assisted with the costs of a national institute on admissions and a document on the learning process implicit in staff development agency programs. Grants were also made to the Canadian Centre for Community Studies for symposia on welfare and to the Bureau of Municipal Research for the welfare aspects of a centennial study and training program on metropolitan problems. The Research and Special Projects Branch of the Canadian Welfare Council sponsored a seminar on the integration of physical and social planning, with special reference to public housing needs, while the Canadian Public Welfare Association, also a Division of the Council, initiated the sponsorship by the Council of a national invitation conference in preparation of a comprehensive statement on social welfare in Canada. The Canadian Association of Social Workers was assisted in an assessment of the professional qualifications of immigrants to Canada with social work education in other countries.

Funds available under the Teaching and Field Instruction provision of the program, designed to strengthen and enlarge the staff of Canadian Schools of Social Work were increased not only to permit additional assistance to existing schools but to help new schools. In addition to the five Canadian schools previously assisted grants were made to new schools located at Waterloo Lutheran University in Ontario and the University of Calgary in Alberta.

As already noted, the number of welfare fellowships and scholarships offered by the Department for nationwide open competition was doubled. Fellowships are provided for advanced study in social work and related social sciences at universities in Canada and elsewhere to individuals with some experience who are considered to have leadership potential in teaching, research and administration. Awards, made for one academic year, are



renewable on the basis of satisfactory progress. Of the nineteen fellowship awards made, four were renewals. Ten successful candidates commenced or continued studies in Canadian universities, six in the United States and three in England.

Welfare scholarships are designed to attract individuals of high calibre into graduate studies at Canadian Schools of Social Work up to the Master's level. These awards are made on the basis of high academic standing in undergraduate studies, and, where applicable, the first year of graduate study in social work. Awards, tenable for one academic year, are renewable on the basis of satisfactory progress. Of the thirty-nine awards made, four were renewals. Of the total group, eleven were enrolled at the McGill University School, nine at Ottawa, and seven at Toronto. Six, five, and one respectively studied at the Universities of Montreal, British Columbia and Manitoba. Both fellowship and scholarship awards are made by the Minister of National Health and Welfare, advised by a National Selection Committee, composed of independent experts. Awards require a commitment by the recipient to subsequent employment in welfare in Canada for a time at least equal to the period of assisted study.

A total of twelve demonstration projects sponsored by five provinces was assisted during the year under review. Of these, half were continuing projects assisted in the previous year, the rest were new. Prince Edward Island began an experimental rehabilitation program for alcoholics. Nova Scotia continued a community development project near Halifax and began a new one within the city. In Ontario, continuing grants were made to a Social Service Information Centre in Burlington and to a Neighbourhood Services Unit in the St. James Town area in Toronto. A potentially important experiment was launched in Toronto in the form of a new Credit Counselling Service. Saskatchewan continued its Prince Albert Social Aid Rehabilitation project and started an experimental adoption service for the placement of Indian and Métis children. In British Columbia continued assistance was provided for two service segments of the Area Development Project in Vancouver. In addition, two new projects were started, one on after care of training school inmates, the other involving the office operations of the Provincial Department of Welfare.

The use by the provinces of the shared cost provisions of the National Welfare Grants program was affected by developments related to the inception of the Canada Assistance Plan. Federal-provincial agreements under the Plan, negotiated during the year, provided, that, retroactive to April 1, 1966, certain payments previously made to the provinces under the National Welfare Grants program are to be made under the new Statute. In addition, the provincial departments, preoccupied with their own legislative and administrative changes related to the Canada Assistance Plan, were often unable to find alternative uses for the National Welfare Grant funds thereby released. This applied particularly to staff extension and staff development. The Bursary provision of the Welfare Grants program, under which awards are made by the provinces for graduate study at Canadian Schools of Social Work, are not affected by the Canada Assistance Plan. The recipients of such awards are not employees of the provincial department



or of an approved agency under the Canada Assistance Plan, although they are committed to accept employment in welfare within the province for a prescribed period following completion of their studies. Employees of such Departments and approved agencies, eligible to attend Canadian Schools of Social Work for graduate study on a leave of absence basis, now come under the Canada Assistance Plan instead of the Training Grant provision of the National Welfare Grants program. The same applies to the variety of non-graduate training activities previously assisted under the Staff Development provision of the Welfare Grants program. However, staff development programs affecting persons not actually employed by the province or an approved agency under the Canada Assistance Plan are still shareable under the National Welfare Grants program. In addition, staff extensions and staff training provisions related to services, such as those of a correctional nature, excluded from the Canada Assistance Plan continue to be shareable under the National Welfare Grants provisions. It will be some time before the impact of the Canada Assistance Plan upon the National Welfare Grants program can be fully assessed.

The rapid evolution of training facilities for welfare in Canada makes heavy demands upon the services of the Division's Consultant on Welfare Training. These developments include new graduate schools of social work, undergraduate courses in welfare, training institutions at the post secondary level and a growing variety of staff training courses. In addition to consultant services, provided through field visits and correspondence, this officer carries administrative responsibilities in relation to the training provisions of the program. These include staffing the National Selection Committee, which advises the Minister on awards of welfare scholarships and fellowships.

The staff of the Welfare Grants Division was further strengthened through the appointment in October, 1966 of a Consultant on Welfare Research. He is involved in the administration of welfare research grants, as well as providing a consultant service to applicants for and recipients of such grants. He staffs the Research Advisory Committee, a group of independent experts who advise on the awarding of welfare research grants. Since his appointment he has visited all the major regions of Canada and maintains an extensive correspondence with the field.

A Cabinet decision taken in January, 1967 opened a significant new perspective for the National Welfare Grants program in the field of mental retardation. This decision authorized new federal expenditures up to \$500,000 annually for five years on research and demonstration projects in health and welfare directly related to the field of mental retardation. The welfare component of this new program will be administered by the Welfare Grants Division.



TABLE 27

## NATIONAL WELFARE GRANTS

Federal Expenditures, by Provision, by Province  
Fiscal Year 1966-67

| Province     | Payments through Provinces |                          | Direct Payments                   |                                 |                                               |                     | Totals    |
|--------------|----------------------------|--------------------------|-----------------------------------|---------------------------------|-----------------------------------------------|---------------------|-----------|
|              | Welfare Service Plan(a)    | Demonstration Project(b) | Teaching and Field Instruction(c) | Scholarships and Fellowships(d) | National Voluntary Welfare Agency Projects(e) | Welfare Research(e) |           |
| Newfoundland | 3,900                      | -                        | -                                 | 3,992                           | -                                             | -                   | 7,892     |
| P.E.I.       | 11,393                     | 25,000                   | -                                 | -                               | -                                             | -                   | 36,393    |
| N.S.         | 6,575                      | 24,442                   | 40,197                            | 6,032                           | 5,073                                         | 10,563              | 92,882    |
| N.B.         | 12,331                     | -                        | -                                 | -                               | -                                             | -                   | 12,331    |
| Que.         | -                          | -                        | -                                 | 35,558                          | -                                             | -                   | 35,558    |
| Ont.         | 203,829                    | 49,953                   | 166,520                           | 64,261                          | 56,619                                        | 69,888              | 611,070   |
| Man.         | -                          | -                        | 70,420                            | -                               | -                                             | 39,091              | 109,511   |
| Sask.        | 7,800                      | 16,008                   | -                                 | 5,940                           | -                                             | 8,996               | 38,744    |
| Alta.        | 18,080                     | -                        | 21,296                            | 5,044                           | -                                             | 3,500               | 47,920    |
| B.C.         | 28,065                     | 66,336                   | 81,467                            | 23,224                          | -                                             | 39,465              | 238,557   |
| N.W.T.       | 28,350                     | -                        | -                                 | -                               | -                                             | -                   | 28,350    |
| Yukon        | 18,875                     | -                        | -                                 | -                               | -                                             | -                   | 18,875    |
| TOTAL        | 339,198                    | 181,739                  | 379,900                           | 144,051                         | 61,692                                        | 171,503             | 1,278,083 |

(a) Require a matching contribution of provincial and/or municipal funds.

(b) Financed out of federal allocations to the provinces but do not require matching.

(c) By location of school.

(d) By home address of recipients.

(e) By location of agency head office.

## INTERNATIONAL WELFARE

With the expansion of Canada's participation in the social development activities of the United Nations, its specialized agencies and other international and national organizations, the Department's international welfare activity was substantially increased during the year.

The Deputy Minister of National Welfare, Canada's representative on the Executive Board of the United Nations Children's Fund (UNICEF), who had been elected Chairman earlier in the year, presided at the 1966 Annual Meeting of the Executive Board held in Addis Ababa, Ethiopia. Project assistance totalling \$27.9 million was approved for 119 countries and territories. In December 1966 a special debate was held in the Third Committee of the 21st General Assembly of the United Nations in recognition of UNICEF's 20th Anniversary. On that occasion the Canadian government announced a special donation of \$100,000 in addition to the regular annual contribution of \$1 million to the organization, commemoration of the tragedies at Dorion, Quebec and Aberfan, Wales. A close working relationship was continued between the Department and the National UNICEF Committee--the voluntary arm of the organization in Canada.

The Eighth Regional Conference of the American States Members of the International Labour Organization was convened in Ottawa in September 1966. The Minister, the Deputy Minister of National Welfare, and other senior officials of the Department served with the Canadian delegation to the Conference, where the Deputy Minister presented a major paper on Canada's social security system. The Director of Research and Statistics attended as a government delegate the 50th Session of the International Labour Conference which had the important task of revising the ILO conventions on old age, invalidity and survivors pensions.

After a two year absence, Canada was re-elected to the Commission for Social Development (formerly the Social Commission) for a three-year term. The Director General of Special Programs was named Canadian representative and took part in the Commission's March 1967 session in New York. This was the first meeting of the Commission under its new mandate which clarifies and reinforces its role as the preparatory body for the Economic and Social Council in the social development field.

The Department supplied briefing and position papers on a wide range of social development and related questions to Canadian delegations attending the 41st Session of the Economic and Social Council and the Third Committee of the 21st General Assembly, and provided an adviser to the delegation attending the latter meeting. Work was completed by the Research and Statistics Directorate on a major report on The Organization and Administration of Social Services in Canada and other information and data was supplied to the United Nations Secretariat upon request.

Additional steps were taken to foster bilateral reciprocity in social security matters between Canada and other countries. In July departmental officials held meetings in Washington to discuss various aspects of the



Canadian and United States social security programs. In September 1966, the United States Social Security Administration removed the restriction which had previously applied to the payment of United States social security benefits to Canadian citizens who had returned to Canada from the United States. Efforts were continued to secure an agreement with the Federal Republic of Germany for similar purposes.

Representatives of the Department attended meetings of various international organizations concerned with social welfare. A number of officers attended the XIIIth International Conference of Social Work in Washington, September 1966. The Director of the International Welfare Division served as Chairman of the initial meeting of Representatives of Ministries of Social Welfare concerned with international co-operation and technical assistance in this field, the Director of Research and Statistics was Rapporteur to the Study Group on Income Maintenance, and other members of the Department undertook various assignments during the Conference. In the same month, the Director of the Canada Assistance Plan attended the Tenth World Congress of the International Society for Rehabilitation of the Disabled held in Wiesbaden, Germany. The Consultant on Family and Child Welfare took part in the Conference of the International Union of Family Organizations held at New Delhi, India in December and, together with the Special Assistant to the Director General of Welfare Assistance and Services, continued to work on the Preparatory Committee for the 1967 Conference to be held in Canada.

During the year under review, the Department's International Co-operation Year project progressed toward completion. Four of the five young community leaders who had come to Canada to participate in academic and observation training programs arranged by the Canadian Association for Health, Physical Education and Recreation under a grant from the Fitness and Amateur Sport Directorate, returned to their homes in Costa Rica, Tunisia, Tanzania and Malaysia.

The International Welfare Division continued to provide technical services to the External Aid Office in the training of sponsored students of social welfare in Canadian universities and other institutions, in the evaluation of welfare projects for which Canadian bilateral aid was being requested, and in the recruitment of Canadian social welfare experts for overseas assignments. The Department maintained its membership on several interdepartmental committees dealing with a variety of international matters, assisted in the planning for the 1968 Human Rights Year in Canada, and was actively associated with several organizations concerned with international development including the Canadian Committee of the International Conference of Social Work, the Overseas Institute of Canada and the Centennial International Development Program.

## EMERGENCY WELFARE SERVICES

The long-range goal of the Division is the development of community capability to provide the essentials of human welfare to persons affected by disaster. Organizing and planning for welfare services in the event of a national emergency or widespread natural disaster is achieved through a network of interrelationships locally, provincially and federally. Basic to the divisional program as first legislated seven years ago, are the activities which support the work of provincial departments of welfare in planning requirements for the five emergency welfare services, Emergency Clothing, Emergency Feeding, Emergency Lodging, Registration and Inquiry and Personal Services, and continuity of welfare programs. The combined efforts of both public and voluntary agencies across Canada have been encouraging and have produced notable progress.

### Organization

The past year has seen some change in the staff of the Division. The Regional Representative for Quebec was seconded to the Centennial Commission for the whole year. In mid-December the Continuity of Government Officer was similarly seconded.

Despite these temporary reductions, the planning processes and procedures which these specialists had assured were maintained through established channels of communication, including field visits and technical assistance in the problems which confront provinces and municipalities such as planning for emergencies during Expo 67, and natural disasters.

The role of the divisional representatives resident in the provinces is not solely one of technical consultation, but involves continuing responsibility for working with the provincial authorities on a day-to-day basis, making administrative decisions and taking operational action. For example, in April during the Manitoba Flood the Prairie Regional Representative became operational as part of the welfare team with authority to make immediate decisions on behalf of the Department with regard to supplies, surplus clothing and personnel. On his advice, two officers were sent from Ottawa to Winnipeg and the outlying communities to actively participate in the operation of welfare services.

The present status of organizational planning at various levels of government throughout the country is creditable.

### Program Development

The pattern established for working with provincial welfare departments was strengthened by the decision at the annual Federal-Provincial EWS Directors Conference held in October 1966, to form an Advisory Committee of representatives from Federal EWS and a number of the provinces. The Committee is advisory to the Director on all phases of planning, organizing, training and operating the emergency welfare services. It will also make recommendations to promote activities for accomplishment of mutually agreed purposes.



The Welfare Program for the Canadian Survival Plan was prepared with the participation of deputy ministers of two provinces. This plan is to be adopted by all departments of welfare, and will become the national welfare program.

## Training

Specialist training was given priority in the training program to increase the number of personnel who can utilize their professional and technical skills for provision of survival and recovery services. Seven courses were conducted at the Canadian Emergency Measures College and 155 candidates were qualified. This represents an increase of 25% over the previous year. The specialist courses included one for Hospital Dietitians conducted in French and attended by 20 French-speaking candidates from six provinces.

Recognizing the contribution which can be made to emergency welfare services by family agencies, the Division held a bilingual Seminar on "The Family Agency's Role in Disaster". The program was designed to assist executive directors in giving leadership in disaster planning to their boards and staffs. It should also promote more effective communication and collaboration between the voluntary agencies and public officials responsible for EWS in the communities represented.

The responsible officers have conferred with Schools of Social Work and Home Economics Departments of universities about curriculum content significant for operation of EWS.

In accordance with the policy to assist provinces with EWS training, service officers of the Division took part in three orientation courses conducted in Newfoundland. Individual officers have lectured on EWS at courses given by other federal departments and at national conferences, and participated in seminars both in provinces and at the Canadian Emergency Measures College.

## Training Material

An operational manual was issued for the Emergency Lodging Service. French versions of manuals for Emergency Lodging, Emergency Feeding, and Registration and Inquiry Services were published. A new manual, Survival Planning for Welfare Institutions, written in English, is ready for distribution.

A variety of new materials and equipment for teaching were developed and increased supplies of slides and films were made available to the provinces. A reference catalogue listing training aids such as films, pamphlets and displays, available to departments of welfare, was compiled.

## Public Education

In conjunction with Information Services, much has been done to further education of the public in the field of emergency welfare. New

displays for use at conventions and exhibitions have been produced, and older displays have been refurbished and made more attractive. Informative articles have been published in Canadian professional and technical journals. The radio series "Your Health - Your Welfare" includes scripts which interpret EWS. Television clips also contributed to public understanding. A heavy demand for information pamphlets made through provincial departments indicated public concern.

### Continuity of Government

During October, the Department participated in the national emergency measures exercise TOCSIN, and was able to test its Readiness Plan. Lessons learned from the Exercise are now under study and steps will be taken to improve the Readiness Plan and standing operating procedures for use by the Welfare Branch in an emergency.

A sample emergency plan for a provincial department of welfare was prepared by the Division and our Continuity of Government Officer visited several provinces to discuss its use in the preparation of their plan for the continuity of their essential welfare programs.

### Operational Equipment and Supplies

Stockpiling of essential equipment and operational forms has continued in order to provide each province with increased capability for an emergency. The majority of operational forms distributed in the past year were French.

Contracts were entered into for the production of ten additional mobile feeding units. Holdings of surplus military clothing have been increased.

A prototype Welfare Centre Kit designed to establish welfare centres quickly and operate them until further supplies become available, has been developed. Four units are in production and will be tested before large-scale production is undertaken.

### International

Collaboration between Divisional staff and their counterparts in the United States Department of Health, Education and Welfare has continued for co-ordination of mutual support activities. Attendance at international conferences has furthered our program goals. In May the Division was represented at the NATO Scientific Working Party in Paris, when two professional papers, "Problems of Group Feeding in Emergency" and "Social Welfare Problems in Recovery" were presented. Also, a paper, "Civilian Emergency Feeding Problems" was given at the Food Defence Study Group of Commonwealth Defence Science Organization. The Divisional Director with other federal departmental representatives, met with officials from Sweden regarding program goals and policies. A summary of the Canadian state of welfare preparedness was prepared for NATO.



## Conclusion

The specific details selected for this report describe not only the Division's work, but also reflect a philosophical frame of reference for disaster preparedness, the process and methods by which program goals are being carried out, and evaluation of the Division's experience in actual disaster operations to provide the basis for new goals to achieve effective operation in emergencies.



Mr. James Worrall, chairman, speaks to members of the Fitness and Amateur Sport Advisory Committee at a meeting. On his right is Dr. Joseph W. Willard, Deputy Minister of National Welfare.



## FITNESS AND AMATEUR SPORT

Under the national Fitness and Amateur Sport Program the principal objective has continued to be to assist the development of services at all levels of activity from the community to international games.

The National Advisory Council on Fitness and Amateur Sport, which advises the Minister on the Program, carries on a continuing review of the progress being made in concert with the Department of National Health and Welfare's Fitness and Amateur Sport Directorate which administers the Program.

Improved competitive results amongst those whose training had been helped by the Program were evident at international, national and regional competitive levels. It is worth noting the relatively sharp increase in successes obtained in sports such as skiing and swimming which have received a consistently high level of federal aid.

Events in which Canadians participated, and for which the training of Canadians was assisted by the Program constitute an impressive list.

### Commonwealth Games

In the summer of 1966, 108 competitors represented Canada in the British Empire and Commonwealth Games in Jamaica. This team won a total of fifty-seven medals, twenty-six more than the 1962 team received in the previous Games in Perth, Australia. The Games confirmed the trend, first noticeable in the greatly improved standing of Canadians in the Tokyo Olympics, toward higher levels of achievement in various sports. Grants totalling \$25,000 had been made during the 1964-65 fiscal year to assist Canadian participants in the Games, in addition to the substantial sums which had supported training and competition leading up to the Games.

### Canadian Winter Games

The first Canadian Winter Games held in Quebec City in February 1967, which initiated a series of major sports events in this Centennial Year, have been called one of the most exciting milestones in Canadian sports history. Approximately 1,800 athletes from the ten provinces and two territories competed in thirteen different activities. The excellent organization and conduct of the Games by the Winter Games Corporation, made up of citizens of the Quebec area, the response by sports leaders and participants in the provinces and territories and the co-operation of the provincial and territorial governments all contributed to make the Games extremely successful.

While the quality of competition varied from one sport to another, the Games gave some indication of Canadian strength and depth in different sports, and some measure of optimism about future international competition. The Games have been recorded on film through a colorful documentary prepared by Information Services in co-operation with the National Film Board.



The swim meet in which this young woman is contending is typical of those supported by Fitness and Amateur Sport Directorate funds.



The Games were financed through an arrangement between the Province of Quebec, the Winter Games Corporation and the federal government. Further to the grant of \$347,500 provided by the department during 1965-66, federal assistance totalling \$352,500 has been made available this year, bringing the federal government's share of the costs of the Games to \$700,000.

#### Pan-American Games

Close liaison and co-operation in preparing for the Pan-American Games was continued with the Province of Manitoba, the City of Winnipeg and the Pan-American Games (1967) Society. The Department of National Defence also actively co-operated, with the reimbursement of its costs of some \$200,000 being made from this Program.

Federal grants totalling \$2,122,604 have been made through the Fitness and Amateur Sport Act to assist the Games Society. Under the terms of the agreement between the three levels of government, a further \$127,396 can be made available by the federal government in the 1967-68 fiscal year.

The Pan-American Games, the largest single sports event ever held in Canada, ranks as one of the major events of the Centennial Year. More than 2,600 athletes representing nearly thirty countries provided a south-of-the-border atmosphere in Canada's central province during July and August.

As an important by-product of the Games, Winnipeg has been left with one of the finest Olympic swimming pools in the world, a fine velodrome, an outstanding track and field complex and numerous other facilities.

#### Special Centennial Projects

The Fitness and Amateur Sport Program also aided Canadian Centennial celebrations by supporting world championships in Canada -- where they were held for the first time -- in badminton (Toronto), fencing (Montreal), lacrosse (Toronto), lawn bowling (Montreal), water skiing (Sherbrooke), and yachting (Montreal/Toronto). Other special Centennial projects supported include a Tri-Country Track and Field meet for young athletes from Canada, Great Britain and France in Ottawa on September 2nd, under the auspices of the Amateur Athletic Union of Canada, and the Commonwealth Junior Tennis Championships.

More than a quarter of a million dollars was provided through the Fitness and Amateur Sport Program for these projects.

#### Recreation Symposium

The implications of more leisure time in working years and of earlier retirement in relation to more purposeful and active living provided the main topics for study at the Canadian Symposium of Recreation, in Montreal in June. It brought together 1500 representatives of more than 170 affiliated agencies and organizations. The Symposium could influence the directions which the development of recreation programming will take in the years ahead.

The Department made grants totalling \$29,900 to help with the organization of the Symposium and has been closely associated with it in a consultative capacity.

### Hockey Study

The Report on the Study of Amateur Hockey in Canada was tabled in the House of Commons late in the fiscal year and has been studied by many organizations concerned with hockey across Canada. The Study had three purposes: to investigate the aims, structure and functions of the Canadian Amateur Hockey Association and other groups acting as the sports governing bodies for amateur hockey; to identify the problems confronting amateur hockey and, to make recommendations for improving the government of amateur hockey. The Report includes thirty-four recommendations regarding the amateur-professional relationship, the new Canadian Amateur Hockey Association-National Hockey League Agreement, hockey and education, government legislation, the national team and the structure and function of the Canadian Amateur Hockey Association.

### Boxing Study

The Council, during its meetings in October 1966, recommended that further government support to amateur boxing be withheld until certain conditions were met. The Council expressed concern for the need to widen the base of effective leadership, adequate supervision of training and competition, safeguards against injury and, as warranted, changes in the rules governing amateur boxing in Canada before it could recommend continued financial support. As a result of this step, the Council, the Department and the Chairman of the Amateur Athletic Union Boxing Committee have been working together to find ways in which amateur boxing can be strengthened and whether, through rule and other changes, the serious objections which have been raised regarding the danger of permanent injury can be overcome. It is hoped a complete report, with recommendations, can be made before the end of the 1967-68 fiscal year.

### National Sports Training Centre

A special committee of Council was established to investigate the possible role a national sports training centre or centres, a system of regional centres or, possibly, some combination of these, could play in assisting the Program.

### Sports Award

For some time the National Advisory Council on Fitness and Amateur Sport has been considering a suitable award for Canadian athletes achieving outstanding performances in international competition. It is hoped that a Canada Sports Medal can be awarded for outstanding achievement in sport for the first time during 1967-68.



## Developmental Planning

A start was made during the year on a new method of dealing with grants to national organizations. In the past these organizations made annual requests for grants which were reviewed by the National Advisory Council before it made its recommendations to the Minister. Now each organization will be encouraged to prepare a three-year developmental plan which would specify what it hoped to accomplish and the kinds of aid it would require.

These plans would be periodically reviewed by Council committees composed of a Council member as chairman along with representatives of the sports governing bodies concerned, those from other organizations related to that particular program, representatives of schools of physical education and of the provincial governments.

Under this new approach the National Advisory Council will consider all plans and, when agreement is reached, recommend them to the Minister. Council's review would concern itself with the amount of money which it would recommend to the Minister for the development of each sport in relation to the developmental program proposed. It would also be concerned with the co-ordination of all plans into a general support program for the encouragement of fitness and amateur sport activities. It is hoped that this approach will not only encourage planning but result in a more efficient processing of grants as they are called for under the plan. No organization will be required to participate.

## Grants to National Organizations

Grants totalling close to \$3.5 million were made to assist national and international sports and recreation programs during the year. While national sports governing bodies and other national organizations receiving grants under the Program vary greatly in organization, structure, and methods of operation, there are a number of common elements, which make possible some assessment of their organizational strength.

In assisting national bodies the Department endeavours to motivate the building of strong organizational structures. It hopes to see officers and members of the organizations increasingly concerned with the quality of leadership at all levels. It encourages organizations to place high priority on a continuing self-evaluation, utilize all available methods to promote and develop the activity for which they are responsible. In addition it encourages them to find and develop different sources of revenues within the possibilities inherent in the type of sport or activity, so that federal grants can be used increasingly for developmental and special projects.

There appears to be some consensus that the co-operative relationships which have been developed with the sports governing bodies, as well as grants to them, resulted in considerable strengthening of the organization of sport in Canada. Participation has increased, coaching and officiating structures have been strengthened and financial and administrative procedures have been improved.

The ways in which federal grants were used to assist national sports governing bodies can be illustrated by several random examples.

National Championships received assistance. The Canadian Canoe Association used financial aid of \$3,874 towards the holding of its National Championships at Ottawa in August 1966, while the Canadian Figure Skating Association was awarded \$4,714 to help in holding the Canadian Figure Skating Championships in Toronto in January, 1967. In view of the Pan-American Games being held in Winnipeg this year, a number of sports governing bodies held their Canadian Championships and Pan-American trials just prior to the Games. Eight organizations received some \$40,289 in support of such projects.

The National Team Concept is largely a result of this Program. The national teams in skiing and hockey were substantially aided by federal grants. The Canadian Amateur Ski Association received \$42,404 and the Canadian Amateur Hockey Association \$48,200 to help with expenses involved in training their national teams and in sending them to their respective world championships. Since their inception, federal grants have, through 1966-67, totalled \$139,925 in support of the national ski team and \$161,020 for the national hockey team.

The Fitness and Amateur Sport Act has had perhaps its biggest impact on training and strong emphasis continued to be placed on the training of coaches and officials, in an effort to improve the quality of leadership at all levels of amateur sport. This aid assisted training projects which were both large and small in scope. The Canadian Women's Field Hockey Association received \$5,721 toward the conduct of five regional clinics for coaches, players and officials across Canada and the Canadian Association of Amateur Oarsmen received \$2,476 for a Canadian Coaching Clinic held in March, 1967, in Toronto. Grants of \$65,332 to the Royal Canadian Legion for its clinics and \$47,289 to the Canadian Amateur Hockey Association for amateur hockey clinics were also made.

To strengthen the administration of organizations conducting fitness, recreation and amateur sports programs, a series of administrative grants was initiated in 1965-66. This year over thirty such grants were given, totalling \$162,819. This assistance enables them to meet general office expenses in handling expanded administrative responsibilities and contribute to the travel costs of members attending executive and annual meetings.

The international aspects of sport continued to receive support. The Canadian Olympic Association received \$30,000 to assist its administration during the last calendar year as well as a grant of \$56,953 to help in sending Canadian teams to the Pan-American Games in Winnipeg.

Several agencies were assisted in projects of interest during the year. Both the Y.M.C.A. and Y.W.C.A. received substantial grants to help with leadership training projects in the field of fitness designed to improve and up-date their programs. The Boys' Clubs, Boy Scouts and others continued to be assisted.

Of the \$3,456,633 paid in grants in 1966-67 to national organizations, \$266,624 supported 2,626 participants representing Canada in international competitions, \$283,029 aided 5,987 participants in national championships and \$372,499 assisted training programs.



## Grants to the Provinces

The three-year federal-provincial agreement signed in September 1964 expired on March 31st of this year and a new agreement was signed. Under this agreement \$1 million has annually been made available to the provinces, with each province or territory being eligible to receive a basic grant of \$35,000 and the balance of the \$1 million distributed according to population. All provinces and territories, except Quebec, participate in the program.

The new agreement, also for three years, is substantially the same as its predecessor but it includes a number of changes designed to facilitate administration.

Through this program the federal government pays sixty percent of the cost of approved provincial projects while the province pays the remaining forty percent. The only exceptions are the scholarships and bursaries awarded to undergraduate students in physical education and recreation where the recipients are nominated by the provinces and the Department pays the total cost.

The provinces are concerned with the promotion and development of fitness and amateur sport programs at the local, district and provincial levels. A number of provinces have established a grant system to assist communities in establishing and operating community programs, particularly through the appointments of full-time professional staff. Significant emphasis has been placed on the support of leadership training projects conducted either by the province, by the provincial branches of the sports governing bodies or associations concerned or, in some instances, on a cooperative basis. Several provinces have used part of their allotment to expand their administrative and advisory services.

Occasionally special grants, outside the terms of the federal-provincial agreement, are made to assist provinces with major projects of importance. Manitoba received \$40,000 to aid in the conversion of facilities at Gimli into a provincial leadership training centre, one that is already receiving extensive use. Within the terms of the agreement, Newfoundland received \$12,500 to assist in the organization of several provincial sports governing branches which had previously not been organized within the province and supplementary assistance of \$15,000 was made available to New Brunswick.

In 1966-67 a total of \$669,289 in grants was made to the provinces compared to \$703,059 in 1965-66.

## Scholarship and Fellowship Program

The scholarship and fellowship program is designed to assist in the continual improvement of the professional competence of physical education teachers and recreation leaders in Canada. One hundred and ten awards were made during the year, involving an expenditure of \$188,675. Thirty-seven of the recipients were working toward their doctorate and seventy-one toward a master's degree.

Since the scholarship program was established in 1962-63 a total of 298 persons have received postgraduate scholarships and fellowships. Of these 33 were women and 265 were men. To date ninety-one have earned master's degrees and fourteen have earned their doctorates. It is expected that approximately seventy-five more will receive postgraduate degrees in the coming months. Investigation has shown that upon completion of their studies, scholarship holders are employed as teachers, department heads and supervisors in Canadian school systems, universities and recreation agencies. Recipients have come from every province and are working in every province.

All scholarship recipients must work at least two years in Canada, or a period equivalent to the duration of the award, upon completion of their studies. Applications for awards are reviewed by the Scholarship Committee of the National Advisory Council composed of representatives of university physical education faculties and provincial governments and all awards are made on the basis of the committee's recommendations.

Undergraduate scholarships and bursaries for students enrolled in a degree course in physical education or recreation are awarded under the provincial program. During this fiscal year a total of 586 awards were made, compared with 529 in the previous year. The total expenditure for scholarships and bursaries was \$153,995 as compared with \$149,375 in 1965-66. Since 1962-63 a total of \$2,072 undergraduate awards have been made involving a total expenditure of \$563,015.

## Fitness Research

The Fitness and Amateur Sport Research Program provides financial assistance for the investigation of problems related to fitness. Grants are made to assist individual research workers and to operate three university research units.

The Research Review Committee of the National Advisory Council, consisting of a group of leading Canadian scientists, reviews all grant applications and makes recommendations in addition to taking a vital part in the total fitness research program.

The primary purpose of this program is to encourage and aid pure and applied research projects which will further our knowledge about Canadians and which, in turn, can lead to more effective programs in the fitness field. To date the majority of the research investigations receiving support have been concerned with the physiological effects of exercise and competitive sport. For instance, one individual study is concerned with growth and development factors as they relate to athletic performance while another is studying the characteristics of adult men engaging regularly in sports or a physical exercise program. A few studies have been sponsored on the psychosociological aspects of sports participation and it is expected that this area will receive more emphasis in the future.

During 1966-67, sixteen individual studies were assisted by an expenditure of \$195,988. An additional sum of \$150,000 was granted to the research units at the Universities of Alberta, Montreal and Toronto



under a five-year agreement which began with the 1964-65 fiscal year. The total of \$345,988 expended for research in 1966-67 compares with a total expenditure of \$283,833.87 in 1965-66.

#### Publicity, Informational and Instructional Material Services

An important part of the Fitness and Amateur Sport Program is the publicity, consultant and information services provided by the Department.

The technical information services program has two major functions. One is to inform the general public about the program and the services it provides. For this purpose press releases are prepared on items of public interest and interpretative articles written for various journals and magazines. A large visual display illustrating the Program was circulated to several conferences during the year and material prepared for use by radio and television. In addition, a descriptive booklet, "Program For Everyone", was produced and circulated widely throughout the country. A clearinghouse service is maintained for information on fitness and amateur sport in Canada. A calendar of sports events is published three times annually which includes locations and dates of such national events as championships, clinics for coaches and officials, annual meetings and international sports events involving Canadian participants. It is hoped that a regular newsletter can be published in the future.

The other function of this program lies in the area of educational materials. The Department, in co-operation with the Queen's Printer and the National Film Board, produces printed materials, films and filmstrips of a technical nature which will usefully assist in the promotion and instruction of various fitness, recreation and amateur sport activities. During 1966-67 a promotional film on water sports, "Get Wet" was completed while films on volleyball, badminton and community recreation neared completion. Among printed materials, a fitness guide for men and women entitled "Get Fit - Keep Fit", prepared by a joint committee of the Canadian Medical Association and the Canadian Association of Health, Physical Education and Recreation was produced. A second booklet in this series which is designed for Canadian youth is in the final stages of production. In addition instructional materials on volleyball, hockey, water sports and track and field are well advanced in preparation along with a guidebook on the planning, building and operation of community centres.

The Department is not only producing educational materials; it is also encouraging more effective co-ordination between the provinces and between the provinces and the federal government to prevent unnecessary duplication of effort. As one means to this end it is currently preparing a catalogue of all publications produced by the provinces and the federal government along with respective policies regarding distribution and reproduction.

Advice is also given to national associations regarding instructional materials and assessments made of their needs and ways in which they can be assisted, in relation to the broad information services program of the Department.

Through a grant to the University of Ottawa, a Documentation Centre is maintained and operated on behalf of the Department to provide a national archive on fitness and amateur sport topics.

### Consultant Services

The main responsibility of the consultant service involves a close working relationship with the more than fifty national associations receiving assistance under the Program. This includes technical advice on the on-going programs of the associations and assessment of the projects which have received federal support.

As more of these associations expand their programs and resulting administrative functions, and as they begin to embark on long-range development plans, the consultants are increasingly being called upon for assistance. Their knowledge of the overall needs and developments in amateur sport and recreation in Canada is a valuable background which can be applied to the particular plans and problems of each organization. They provide direct advisory assistance to the associations and services as required, and are a link between the federal government and each agency concerned with the program.



TABLE 28

## ALLOCATIONS AND GRANTS

UNDER FEDERAL-PROVINCIAL FITNESS AND AMATEUR SPORT PROGRAM  
1965-66 - 1966-67

| <u>PROVINCE</u>                                           | <u>ALLOCATION</u> |                | <u>GRANTS</u>  |                |
|-----------------------------------------------------------|-------------------|----------------|----------------|----------------|
|                                                           | <u>1965-66</u>    | <u>1966-67</u> | <u>1965-66</u> | <u>1966-67</u> |
|                                                           | \$                | \$             | \$             | \$             |
| Newfoundland                                              | 49,828            | 49,687         | 49,565         | 48,811         |
| Prince Edward Island                                      | 38,227            | 38,166         | 38,227         | 35,899         |
| Nova Scotia                                               | 57,891            | 57,250         | 54,081         | 50,925         |
| New Brunswick                                             | 53,595            | 53,351         | 52,291         | 52,970         |
| Quebec                                                    | 202,841           | 202,448        | -              | -              |
| Ontario                                                   | 233,486           | 235,281        | 104,007        | 128,982        |
| Manitoba                                                  | 63,876            | 63,114         | 63,876         | 63,114         |
| Saskatchewan                                              | 63,317            | 62,937         | 53,410         | 60,990         |
| Alberta                                                   | 78,324            | 77,683         | 34,398         | 43,874         |
| British Columbia                                          | 87,377            | 88,881         | 84,890         | 88,252         |
| Northwest Territories                                     | 35,759            | 35,762         | 35,477         | 35,762         |
| Yukon                                                     | 35,479            | 35,440         | 27,837         | 32,210         |
|                                                           | <hr/>             |                | <hr/>          |                |
|                                                           | \$1,000,000       | \$1,000,000    | \$598,059      | \$641,789      |
|                                                           | <hr/>             |                | <hr/>          |                |
| Supplementary Grants to Newfoundland<br>and New Brunswick |                   |                | \$ 85,000      | \$ 12,500      |
|                                                           |                   |                | 20,000         | 15,000         |
|                                                           |                   |                | <hr/>          |                |
|                                                           |                   |                | \$703,059      | \$669,289      |
|                                                           |                   |                | <hr/>          |                |

(1) In 1966-67:

Additional allocations of \$12,500 and \$15,000 were made available, on request, to the Provinces of Newfoundland and New Brunswick to finance supplementary projects under the terms of the agreements.

TABLE 29

SCHOLARSHIPS AND FELLOWSHIPS  
AWARDED TO POSTGRADUATE STUDENTS  
UNDER FITNESS AND AMATEUR SPORT PROGRAM  
1965-66 - 1966-67

| <u>Type of Award</u>                                                         | <u>No.</u>     |                | <u>Amount</u>  |                |
|------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|
|                                                                              | <u>1965-66</u> | <u>1966-67</u> | <u>1965-66</u> | <u>1966-67</u> |
| Postgraduate Scholarships                                                    |                |                | \$             | \$             |
| Masters Level                                                                |                |                |                |                |
| - Short Term                                                                 | 39             | 31             | 33,150         | 24,000         |
| - Full Year at \$2,000                                                       | 44             | 38             | 88,000         | 76,000         |
| at \$1,000                                                                   | 3              | 2              | 3,000          | 2,000          |
|                                                                              | —              | —              | —              | —              |
| Sub-Total                                                                    | 86             | 71             | 124,150        | 102,000        |
|                                                                              | —              | —              | —              | —              |
| Doctorate Level                                                              |                |                |                |                |
| - Short Term                                                                 | 17             | 10             | 17,550         | 10,800         |
| - Full Year                                                                  | 23             | 27             | 46,000         | 54,000         |
| (Dependent's Allowance at<br>\$500 - full year doctorates)                   | (21)           | (26)           | 10,500         | 13,000         |
|                                                                              | —              | —              | —              | —              |
| Sub-Total                                                                    | 40             | 37             | 74,050         | 77,800         |
|                                                                              | —              | —              | —              | —              |
| Special Fellowships                                                          | 1              | 2              | 3,080          | 3,236          |
|                                                                              | —              | —              | —              | —              |
| Sub-Total                                                                    | 1              | 2              | 3,080          | 3,236          |
|                                                                              | —              | —              | —              | —              |
| Travel Allowance - Full Year<br>Masters in Canada and<br>Full Year Doctorate |                |                | 6,419          | 5,639          |
|                                                                              |                |                | —              | —              |
| Total                                                                        | 127            | 110            | \$207,699      | \$188,675      |
|                                                                              | ==             | ==             | ==             | ==             |



TABLE 30

RESEARCH GRANTS  
AWARDED UNDER FITNESS AND AMATEUR SPORT PROGRAM  
1965-66     -     1966-67

| <u>Name</u>                        | <u>1965-66</u><br>\$ | <u>1966-67</u><br>\$ |
|------------------------------------|----------------------|----------------------|
| Institute of Cardiology - Montreal | 3,646.74             | 15,000.00            |
| University of Alberta              | 82,257.16            | 91,279.00            |
| University of British Columbia     | 5,638.99             | 26,722.00            |
| University of Manitoba             | 11,226.95            | 13,232.00            |
| Montreal General Hospital          | 7,582.37             | 2,500.00             |
| University of Montreal             | 25,000.00            | 50,000.00            |
| University of Saskatchewan         | 23,185.26            | 23,635.00            |
| University of Toronto              | 75,078.42            | 73,682.00            |
| University of Western Ontario      | 32,456.92            | 19,993.00            |
| Royal Victoria Hospital            | 17,761.06            | 21,325.00            |
| McGill University                  | --                   | 8,620.00             |
|                                    | <hr/>                | <hr/>                |
|                                    | \$283,833.87         | \$345,988.00         |
|                                    | <hr/> <hr/>          | <hr/> <hr/>          |

Note:     Some of the grants were made for specific projects - others were made to Fitness Research Units.

TABLE 31

UNDERGRADUATE SCHOLARSHIPS AND BURSARIES  
AWARDED UNDER THE FITNESS AND AMATEUR SPORT ACT

| Province              | Type                      | Award No. |         | Amounts   |           | Total No. Awards |         | Total Amounts |             |
|-----------------------|---------------------------|-----------|---------|-----------|-----------|------------------|---------|---------------|-------------|
|                       |                           | 1965-66   | 1966-67 | 1965-66   | 1966-67   | 1965-66          | 1966-67 | 1965-66       | 1966-67     |
| Newfoundland          | Scholarships<br>Bursaries | 1         | -       | \$<br>500 | \$<br>-   | 44               | 6       | \$<br>13,650  | \$<br>1,200 |
|                       |                           | 43        | 6       | 13,150    | 1,200     | -                | -       | -             | -           |
| Prince Edward Island  | Scholarships<br>Bursaries | 3         | 3       | 1,500     | 1,500     | 26               | 23      | 8,500         | 8,100       |
|                       |                           | 23        | 20      | 7,000     | 6,600     | -                | -       | -             | -           |
| Nova Scotia           | Scholarships<br>Bursaries | 7         | 9       | 3,500     | 4,500     | 84               | 75      | 21,550        | 22,425      |
|                       |                           | 77        | 66      | 18,050    | 17,925    | -                | -       | -             | -           |
| New Brunswick         | Scholarships<br>Bursaries | 5         | 3       | 2,500     | 1,000     | 26               | 26      | 9,800         | 7,150       |
|                       |                           | 21        | 23      | 7,300     | 6,150     | -                | -       | -             | -           |
| Quebec                | Scholarships<br>Bursaries | -         | -       | -         | -         | -                | -       | -             | -           |
|                       |                           | -         | -       | -         | -         | -                | -       | -             | -           |
| Ontario               | Scholarships<br>Bursaries | 3         | 2       | 1,500     | 1,000     | 191              | 274     | 44,125        | 58,620      |
|                       |                           | 188       | 272     | 42,625    | 57,620    | -                | -       | -             | -           |
| Manitoba              | Scholarships<br>Bursaries | -         | -       | -         | -         | 29               | 40      | 4,500         | 5,000       |
|                       |                           | 29        | 40      | 4,500     | 5,000     | -                | -       | -             | -           |
| Saskatchewan          | Scholarships<br>Bursaries | 16        | 29      | 6,800     | 12,700    | 36               | 42      | 16,600        | 18,800      |
|                       |                           | 20        | 13      | 9,800     | 6,100     | -                | -       | -             | -           |
| Alberta               | Scholarships<br>Bursaries | 6         | 2       | 2,100     | 600       | 64               | 64      | 19,100        | 18,900      |
|                       |                           | 58        | 62      | 17,000    | 18,300    | -                | -       | -             | -           |
| British Columbia      | Scholarships<br>Bursaries | 12        | 13      | 6,000     | 6,500     | 29               | 36      | 11,550        | 13,800      |
|                       |                           | 17        | 23      | 5,500     | 7,300     | -                | -       | -             | -           |
| Northwest Territories | Scholarships<br>Bursaries | -         | -       | -         | -         | -                | -       | -             | -           |
|                       |                           | -         | -       | -         | -         | -                | -       | -             | -           |
| Yukon                 | Scholarships<br>Bursaries | -         | -       | -         | -         | -                | -       | -             | -           |
|                       |                           | -         | -       | -         | -         | -                | -       | -             | -           |
| TOTALS:               | Scholarships<br>Bursaries | 53        | 61      | \$ 24,400 | \$ 27,800 | 529              | 586     | \$149,375     | \$153,995   |
|                       |                           | 476       | 525     | 124,975   | 126,195   | -                | -       | -             | -           |
|                       |                           | 529       | 586     | \$149,375 | \$153,995 | 529              | 586     | \$149,375     | \$153,995   |



TABLE 32

GRANTS UNDER THE FITNESS AND AMATEUR SPORT ACT TO SPORTS GOVERNING BODIES,  
BY TYPE OF PROGRAM  
FOR THE FISCAL YEARS 1965-66 and 1966-67

| Organization                                              | National Championships |         | International Meets |         | Training Programs |         | Special Programs or Events |         | Administration |         | TOTALS  |         |
|-----------------------------------------------------------|------------------------|---------|---------------------|---------|-------------------|---------|----------------------------|---------|----------------|---------|---------|---------|
|                                                           | 1965-66                | 1966-67 | 1965-66             | 1966-67 | 1965-66           | 1966-67 | 1965-66                    | 1966-67 | 1965-66        | 1966-67 | 1965-66 | 1966-67 |
|                                                           | \$                     | \$      | \$                  | \$      | \$                | \$      | \$                         | \$      | \$             | \$      | \$      | \$      |
| SPORTS GOVERNING BODIES -<br>COORDINATING MULTIPLE SPORTS |                        |         |                     |         |                   |         |                            |         |                |         |         |         |
|                                                           |                        |         |                     |         |                   |         |                            |         |                |         |         |         |
|                                                           |                        |         |                     |         |                   |         |                            |         |                |         |         |         |
|                                                           |                        |         |                     |         |                   |         |                            |         |                |         |         |         |
| British Empire and Commonwealth Games Association         | -                      | -       | -                   | -       | -                 | -       | -                          | -       | 2,325          | -       | 2,325   | -       |
| Canadian Olympic Association                              | -                      | -       | -                   | -       | -                 | -       | -                          | -       | 30,000         | 30,000  | 30,000  | 30,000  |
| Sub-Total                                                 | -                      | -       | -                   | -       | -                 | -       | -                          | -       | 32,325         | 30,000  | 32,325  | 30,000  |
| SPORTS GOVERNING BODIES                                   |                        |         |                     |         |                   |         |                            |         |                |         |         |         |
|                                                           |                        |         |                     |         |                   |         |                            |         |                |         |         |         |
|                                                           |                        |         |                     |         |                   |         |                            |         |                |         |         |         |
|                                                           |                        |         |                     |         |                   |         |                            |         |                |         |         |         |
| Amateur Athletic Union of Canada                          |                        |         |                     |         |                   |         |                            |         |                |         |         |         |
| - Boxing                                                  | 5,381                  | 4,041   | -                   | -       | -                 | -       | -                          | -       | 11,787         | 14,166  | 11,787  | 26,080  |
| - Fencing                                                 | 3,339                  | 8,326   | -                   | -       | -                 | -       | -                          | -       | -              | -       | 5,381   | 12,515  |
| - Gymnastics                                              | 3,672                  | 5,244   | 1,100               | 22,080  | 2,500             | 11,240  | -                          | -       | -              | -       | 6,939   | 41,646  |
| - Handball                                                | -                      | 1,982   | 2,932               | 7,632   | 2,000             | 5,622   | -                          | -       | -              | -       | 8,604   | 18,498  |
| - Track and Field                                         | 27,884                 | 14,266  | -                   | 783     | -                 | 1,455   | -                          | -       | -              | -       | -       | 4,220   |
| - Weightlifting                                           | 3,805                  | 3,377   | 722                 | -       | 4,379             | 9,500   | 4,500                      | -       | -              | -       | 33,106  | 23,766  |
| - Wrestling                                               | 9,688                  | 4,988   | 6,665               | 833     | 5,766             | -       | -                          | -       | -              | -       | 14,849  | 4,210   |
| Canadian Amateur Basketball Association                   | 31,740                 | 43,743  | 12,478              | 1,814   | 6,624             | 2,034   | -                          | -       | 1,566          | 2,470   | 17,932  | 8,836   |
| Canadian Amateur Bobsleigh Association                    | -                      | 1,533   | 5,944               | -       | -                 | 22,854  | -                          | -       | 638            | -       | 52,364  | 69,067  |
| Canadian Amateur Hockey Association                       | -                      | -       | 5,983               | 5,983   | -                 | 5,541   | -                          | -       | -              | -       | 6,582   | 13,057  |
| Canadian Amateur Ski Association                          | 17,250                 | 21,065  | 48,950              | -       | 3,500             | 48,200  | -                          | 47,289  | -              | -       | 52,450  | 95,489  |
| Canadian Amateur Softball Association                     | -                      | -       | 43,784              | 32,400  | 19,612            | 23,021  | -                          | -       | 1,894          | 2,138   | 82,540  | 98,113  |
| Canadian Amateur Speedskating Association                 | 2,500                  | 3,000   | -                   | 3,400   | 6,000             | -       | -                          | -       | 1,248          | 943     | 6,000   | 4,343   |
| Canadian Amateur Swimming Association                     | -                      | -       | -                   | -       | 4,342             | 6,781   | -                          | -       | 1,993          | 4,860   | 8,090   | 12,241  |
| - Swimming                                                | 16,500                 | 18,179  | 16,840              | 4,787   | 10,000            | 4,310   | -                          | -       | -              | -       | 43,340  | 27,276  |
| - Diving                                                  | -                      | 4,663   | -                   | -       | 5,232             | 8,930   | -                          | -       | -              | -       | 5,232   | 13,593  |
| - Synchronized                                            | 2,916                  | 9,279   | 2,436               | 5,372   | 3,600             | 16,940  | -                          | -       | -              | -       | 8,952   | 31,591  |
| - Water Polo                                              | 3,240                  | 4,705   | 2,145               | 2,769   | 1,110             | -       | -                          | -       | -              | -       | 6,495   | 7,474   |
| Canadian Archery Association                              | -                      | 2,848   | 5,198               | -       | 1,972             | -       | -                          | -       | 915            | 1,076   | 8,085   | 3,924   |
| Canadian Association of Amateur Oarsmen                   | 5,764                  | 20,537  | 9,000               | 11,476  | 2,536             | 2,476   | -                          | -       | 1,158          | 1,116   | 18,458  | 35,605  |
| Canadian Badminton Association                            | 3,950                  | 7,800   | 1,050               | 17,591  | 2,425             | 7,703   | -                          | -       | 1,309          | 1,362   | 9,684   | 34,456  |
| Canadian Canoe Association                                | 1,940                  | 3,874   | 764                 | 2,558   | 1,710             | 10,000  | -                          | -       | -              | 2,379   | 4,700   | 18,811  |
| Canadian Cricket Association                              | -                      | 4,150   | -                   | 1,343   | 2,621             | -       | -                          | -       | 880            | 3,111   | 4,265   | 8,604   |
| Canadian Field Hockey Association                         | 2,730                  | 5,056   | 2,820               | 6,748   | -                 | -       | -                          | -       | 1,078          | 2,356   | 6,628   | 7,412   |
| Canadian Figure Skating Association                       | 7,363                  | 4,714   | 7,213               | -       | 22,891            | 25,857  | -                          | -       | 2,032          | 3,788   | 39,499  | 41,107  |
| Canadian Intercollegiate Athletic Union                   | 15,500                 | 16,000  | -                   | -       | -                 | -       | -                          | -       | 1,510          | 3,516   | 17,010  | 19,516  |
| Canadian Kodokan Black Belt Association                   | 3,000                  | 4,387   | -                   | -       | -                 | -       | -                          | -       | -              | 1,763   | 3,000   | 6,150   |
| Canadian Lacrosse Association                             | -                      | 9,738   | -                   | -       | 20,050            | 9,682   | -                          | -       | 945            | 3,386   | 20,995  | 46,806  |
| Canadian Ladies Golf Union                                | 3,510                  | 3,198   | -                   | 24,000  | -                 | -       | -                          | -       | -              | -       | 3,510   | 4,425   |
| Canadian Lawn Bowling Council                             | 2,996                  | 5,404   | -                   | 1,227   | -                 | -       | -                          | -       | 511            | 815     | 3,507   | 12,098  |
| Canadian Lawn Tennis Association                          | 3,625                  | 6,163   | 3,000               | 5,879   | -                 | -       | -                          | -       | 1,340          | 3,359   | 27,715  | 13,892  |
| Canadian Soccer Football Association                      | 7,500                  | 6,496   | -                   | 4,370   | 19,750            | -       | -                          | -       | 1,156          | 7,460   | 17,656  | 24,411  |
| Canadian Table Tennis Association                         | 2,010                  | 300     | 740                 | -       | 9,000             | 10,455  | -                          | -       | 952            | 1,336   | 3,702   | 5,600   |
| Canadian Volleyball Association                           | 9,901                  | 11,200  | -                   | 1,932   | -                 | 2,032   | -                          | -       | 1,692          | 3,533   | 32,998  | 16,862  |

TABLE 32 (Cont'd)

| Organization                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | National Championships |         | International Meets |         | Training Programs |         | Special Programs or Events |         | Administration |         | TOTALS  |           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------|---------------------|---------|-------------------|---------|----------------------------|---------|----------------|---------|---------|-----------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1965-66                | 1966-67 | 1965-66             | 1966-67 | 1965-66           | 1966-67 | 1965-66                    | 1966-67 | 1965-66        | 1966-67 | 1965-66 | 1966-67   |
| <u>SPORTS GOVERNING BODIES (Cont'd)</u><br><br>Canadian Water-Ski Association<br>Canadian Wheelmen's Association<br>Canadian Women's Field Hockey Association<br>Canadian Yachting Association<br>National Federation of Amateur Baseball Inc.<br>Canadian Amateur Football Association<br>Royal Canadian Golf Association<br>Rugby Union of Canada<br>Shooting Federation of Canada<br>Canadian Team Handball Federation<br><br>Sub-Total                                             | \$                     | \$      | \$                  | \$      | \$                | \$      | \$                         | \$      | \$             | \$      | \$      | \$        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | 3,731   | 6,240               | 37,108  | -                 | -       | -                          | -       | -              | -       | 6,240   | 40,839    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | 5,070   | -                   | -       | -                 | -       | -                          | -       | -              | -       | 1,025   | 13,969    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | 2,015             | 5,932   | 1,025                      | 2,987   | 2,280          | 1,240   | 2,280   | 6,961     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 4,248                  | 4,248   | 5,000               | 56,350  | 14,000            | 15,000  | 2,600                      | 1,949   | 25,848         | 1,949   | 25,848  | 77,547    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 14,920                 | 3,975   | -                   | -       | 9,483             | -       | 1,696                      | -       | 25,469         | -       | 25,469  | 3,995     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | -                 | 17,014  | -                          | 3,377   | 2,000          | -       | 2,000   | 20,391    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 595                    | -       | -                   | 1,666   | -                 | -       | -                          | -       | 595            | -       | 595     | 1,666     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | 4,872   | -                   | -       | -                 | 8,000   | 358                        | 1,950   | 358            | 1,950   | 358     | 14,822    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1,286                  | 877     | 2,336               | 8,144   | -                 | -       | 1,212                      | 3,097   | 4,834          | -       | 4,834   | 12,119    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | 570     | -                   | 5,031   | -                 | -       | -                          | -       | -              | -       | -       | 5,601     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 218,753                | 283,599 | 189,791             | 275,405 | 183,118           | 294,774 | 29,905                     | 59,203  | 41,760         | 81,973  | 662,697 | 1,014,444 |
| <u>AGENCIES OPERATING PROGRAMS</u><br><br>Association Canadienne des Centres de Loisirs<br>Boys' Clubs of Canada<br>Canadian Amateur Sports Federation<br>Canadian Camping Association<br>Canadian Ski Patrol<br>Canadian Union of Students<br>Federation of Silent Sports<br>Girl Guides of Canada<br>Guides Catholiques du Canada<br>Royal Canadian Legion<br>Royal Life Saving Society<br>Young Men's Christian Association<br>Young Women's Christian Association<br><br>Sub-Total | -                      | -       | -                   | -       | 32,000            | 12,630  | -                          | -       | 9,900          | 9,900   | 41,900  | 22,530    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | 8,000             | -       | -                          | -       | -              | -       | 8,000   | -         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | -                 | -       | -                          | -       | 1,610          | 8,760   | 1,610   | 8,760     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | -                 | -       | -                          | -       | 1,278          | 2,848   | 1,278   | 2,848     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | -                 | -       | 750                        | -       | -              | -       | 750     | -         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | 13,107              | -       | -                 | -       | -                          | -       | -              | -       | 13,017  | -         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3,663                  | -       | -                   | -       | -                 | -       | -                          | -       | -              | -       | 3,663   | -         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | 17,564            | -       | -                          | -       | -              | -       | 17,564  | -         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | 13,250            | 3,554   | -                          | -       | -              | -       | 13,250  | 3,554     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | 62,717            | 65,332  | -                          | -       | -              | -       | 62,717  | 65,332    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | 9,910             | -       | -                          | -       | -              | -       | 11,707  | -         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | 13,190            | 17,295  | -                          | -       | -              | -       | 13,190  | 17,295    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | 9,500             | -       | -                          | 27,625  | -              | -       | 9,500   | 27,625    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3,663                  | -       | 13,107              | -       | 166,221           | 98,811  | 2,547                      | 27,625  | 12,788         | 21,508  | 198,326 | 147,944   |
| <u>PROFESSIONAL ASSOCIATIONS</u><br><br>Canadian Association of Health, Physical Education and Recreation<br>Parks and Recreation Association of Canada<br><br>Sub-Total                                                                                                                                                                                                                                                                                                               | -                      | -       | -                   | -       | -                 | -       | -                          | -       | 15,000         | 24,224  | 15,000  | 24,224    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | -                 | -       | 2,200                      | 12,000  | -              | 5,114   | 2,200   | 17,114    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | -                 | -       | 2,200                      | 12,000  | 15,000         | 29,338  | 17,200  | 41,338    |
| <u>SPECIAL PROJECTS</u><br><br>First Canadian Winter Games<br>International Co-Operation Year Project<br>- Y.M.C.A.                                                                                                                                                                                                                                                                                                                                                                    | -                      | -       | -                   | -       | -                 | -       | 347,500                    | 352,500 | -              | -       | 347,500 | 352,500   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | -                 | -       | 21,000                     | -       | -              | -       | 21,000  | -         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                      | -       | -                   | -       | -                 | -       | -                          | -       | -              | -       | -       | -         |



TABLE 32 (Cont'd)

[illegible]





## LEGAL

The Legal Division is essentially a service division to the Department. As such, it serves the Minister and the Deputy Heads of the Department, including all of the Directorates, Divisions and Sub-Divisions.

It also provides legal services in connection with any administrative matters where there are possible legal implications.

Arising out of the foregoing, the Legal Division has been concerned with the preparation of regulations, contracts, opinions, and other legal documents of all kinds. It is responsible for the preliminary development and preparation of legislation of immediate concern to the Department and its initial implementation.

The Division advises on liability respecting claims against the Department within the provision of the current Orders-in-Council.

During the past year the Division has been particularly active in connection with matters relating to the development of the Canada Assistance Plan and Regulations thereunder, the Health Resources Fund Act and Regulations, the Medical Insurance Act and the amendments to the Food and Drugs Act in respect of restricted drugs and the amendments to the Old Age Security Act and revision of Regulations thereunder. The Legal Division also participated in the development of the Pension Plan and also in the preparation of agreements to insure the uniformity of application of the Canada Pension Plan and the Quebec Pension Plan.

The Division acts as adviser in connection with prosecutions arising out of the enforcement of certain of the Acts which are within Department administration, including the Food and Drugs Act, Family Allowances Act, Old Age Security Act and the Narcotic Control Act.

The Legal Division, moreover, acts in a special capacity in providing advice through the Deputy Ministers to the Department of the Registrar General respecting the incorporation of companies under the Canada Corporations Act that involve aspects of health or welfare.





A much-expanded Research and Statistics Directorate conducts studies and makes reports on the many areas involved in health and welfare



## RESEARCH AND STATISTICS

The reorganization of the Directorate commenced in the previous year continued into the year 1966-67. The reports of the four new divisions that have been created within the Directorate follow these introductory remarks.

From April to December the Director concentrated on the planning and development of the Guaranteed Income Supplement program, acting as liaison officer with Department of Finance officials in the planning stages and with Department of Justice officials in the preparation of legislation. Early in 1967 he directed the planning of and arrangements for the statistical program arising from the Guaranteed Income Supplement. During June he attended the International Labour Organization 50th Conference in Geneva as an adviser to the Canadian Government delegation on social security, representing Canada in the Social Security Committee concerned with revising Conventions 35 to 40. Again in September he attended the I. L. O. American Regional Conference held in Ottawa as the alternate delegate to the Deputy Minister of National Welfare on social security. The Director organized and chaired the second meeting of the federal-provincial committee on welfare statistics in Ottawa on December 12 and 13, at which substantial agreement was reached concerning the administrative statistics program for the Canada Assistance Plan. He also organized and chaired the fifth meeting of the federal provincial Sub-Committee on Quality of Care, Research and Statistics under the Hospital Insurance program, meeting in Ottawa on February 15 to 17, 1967, and the seventh meeting of the inter-departmental Sub-Committee on Canada Pension Plan Statistics held in March 1967. The Director continued to serve as a consulting member of the Advisory Committee on HIB Statistics to the United States Health Insurance Bureau, attending meetings of this group in Washington in April and September. In September also he attended the Thirteenth International Conference of Social Work in Washington, where he served as rapporteur for the Income Maintenance Study Group, preparing a paper on the Implications of Urbanization for Income Maintenance Programs. In January he attended the meetings of the National Council of Welfare and of the Deputy Ministers of Welfare, where he reported on welfare research and welfare statistics. On February 14 he attended the meetings of the Deputy Ministers of Health where he presented a report on current cost estimates for provincial medical care insurance programs. He served on the Welfare Research Advisory Committee meeting in Ottawa February 20 to 22 to review project applications for welfare research grants. On February 6 he and the Principal Research Officer, Biostatistics, attended a special exploratory meeting of a committee on uniform data on voluntary welfare agency activities held in Quebec in conjunction with the Annual Meeting of the Community Chests and Councils of Welfare. In March he attended meetings of the Interdepartmental Committee on Research convened by the Special Planning Secretariat, the Interdepartmental Committee on Socio-Economic Statistics convened by the Dominion Statistician, and its Sub-committee on Data Linkage Techniques.

At various times during the year the Director lectured on medical economics, research methodology and social security to students at the University of Toronto and St. Patrick's College; some of these lectures were published during the year under the titles "How to do Research in

Social Welfare" and "The Economics and Costs of Health Care in Canada". He also prepared a paper for delivery at the April 1967 meetings of the Canadian Public Health Association on "Developments in Public Assistance Medical Care before the Canada Assistance Plan".



## HEALTH RESEARCH

The Health Research Division conducts studies in the economic and social aspects of health care, with special emphasis on underlying principles, costs, methods of financing, social effectiveness and administrative methods. The four major functional areas are: medical care, hospital care, public health and rehabilitation, and health resources and expenditures.

### Medical Care

Much of the research program during the year was related to Bill C-227, or the Medical Care Act, which authorizes federal financial assistance to provincially administered medical insurance plans. This legislation was passed by the Canadian Parliament in December, 1966, and is slated to become operative not later than July 1, 1968.

The Principal Research Officer (Health) assisted the planning and development of the medical care legislation in several ways. Intensive study was made of the implications of the principles incorporated into the legislation and notes and memoranda were developed for departmental use. Cost estimate material for 1968 was prepared, and following the enactment of the legislation, a document entitled "Estimates of Program Costs of Physicians' Services, 1968" was submitted to the Federal-Provincial Technical Conference on Medical Care held on February 14, 1967. Detailed cost studies on each individual province were provided later to the provincial authorities.

Another major activity during the year was the study of earnings of physicians. The source data were for the most part, unpublished tabulations supplied by the Taxation Division of the Department of National Revenue. Some 23 basic tables were developed to form part of a new study which examines trends in the professional earnings and expenses of practice of active fee practice physicians in Canada from 1957 to 1965 inclusive. Plans were under consideration toward the end of the year for further studies of doctors' incomes to be undertaken in collaboration with the Canadian Medical Association and the Department of National Revenue.

Efforts were made to keep abreast of medical care program developments in the provinces. A Research and Statistics Memorandum on the Ontario Medical Services Insurance Plan was published, and similar memoranda on the British Columbia Medical Plan, and the Alberta Health Program had been completed by the end of the year. Special articles entitled "Health Insurance 1966: Provincial Government Programs," and "Public Medical Care Insurance in Saskatchewan - The First Three Years" were published in Canada's Health and Welfare.

Research continued on voluntary medical care insurance in Canada. The annual survey of population coverage and benefit payments by voluntary carriers was conducted. A bulletin entitled "Voluntary Medical Insurance in Canada, 1955-1965" was nearing completion at the end of the year. Considerable attention was directed to special examination of the utilization and cost experience of specific voluntary plans that have supplied information to the Division.

During the year also, the Canada Assistance Act was enacted by Parliament, providing among other things, for federal sharing of the cost to the provinces and their municipalities, of health care costs incurred by persons in need. Consideration was given to the development of health care statistics as part of a federal-provincial welfare statistics program. Continuing attention was directed to provincial developments and at the end of the year a comprehensive report on existing health care programs for public assistance recipients was nearly ready for publication.

Among other major projects were completion of a questionnaire from the International Social Security Association entitled "Volume and Cost of Sickness, Maternity and Employment Injury Benefits in Kind and Cash", and assistance with an article on health insurance for the Encyclopaedia Canadiana. Appraisal of research project submissions related to health economics was another activity. Also, assistance was supplied in editing and reviewing a number of documents on medical care prepared by various organizations and individuals.

Other areas of continuing interest were studies of earnings of dentists, analysis of family health expenditures, analysis of supply of physicians and dentists, review of doctors' fee schedules, and consideration of plans for development of medical care utilization and cost statistics.

#### Hospital Care

The Hospital Care Section continued to supply research services to the Health Insurance and Resources Branch despite a severe shortage of staff.

The main factors affecting increases in hospital operating costs during the last few years were reviewed in the annual report prepared for the use of Treasury Board. Estimated per capita costs of in-patient services in Canada in 1966 were calculated as the basis for determining federal advances to the provinces under the hospital insurance program during 1966, and were submitted to and accepted by Treasury Board. The report for 1967 was in preparation at the end of the year under review.

A report on 1964 hospitalization experience covering utilization and bed accommodation, selected data on patient characteristics, hospital personnel and hospital expenditures was prepared as part of the annual report of the Minister of National Health and Welfare under the Hospital Insurance and Diagnostic Services Act for the fiscal year ending March 31, 1966.

Other studies during the year included analysis of construction cost indices, completion of a report on the relationship of hospital meal days and the size of hospital dietary departments, a memorandum on the problem of the capital debt of hospitals and provincial financial assistance in this field, review of methods for calculating the insured population in certain provinces, and cost estimates for the inclusion of active treatment mental and tuberculosis hospital care under the Hospital Insurance program.



Divisional staff also participated in the First Hospital Construction Cost Seminar, and the review and revision of the annual hospital statistical reporting forms which was carried out during the year by the Biostatistics Division in collaboration with the Dominion Bureau of Statistics, the Hospital Insurance Division of this Department, and provincial hospital insurance agencies.

#### Public Health and Rehabilitation

The chief accomplishment of the Public Health Section during the year was the publishing of a 237 page document entitled "Provincial Health Services by Province", which contains separate chapters on each province and on health services in the North, and describes the principal health programs in some detail including changes made up to 1966. Special attention is given to the newer health programs in each province such as hospital insurance plans, medical care insurance schemes and the extension of rehabilitation services to the chronically ill and disabled. A companion volume nearing completion at the end of the year is entitled "Provincial Health Services by Program"; it will review the programs and services organized by provincial and local health agencies, both governmental and voluntary, according to specialized function or health field.

The Section continued to maintain up-to-date references on rehabilitation and chronic disease services and to supply information and consultation on request. Reports on rehabilitation services were prepared for international agencies, and a document on "Basic Health Services" prepared by the World Health Organization was reviewed. There were various special studies such as an analysis of payment for physicians' services under health grant programs, development of statistical and descriptive material on institutional care for the aged, and a survey of expenditures on respiratory diseases by provincial Workmen's Compensation Boards. Contributions were also made to a United Nations questionnaire on family and youth, to the United Nations County Study Project in such areas as rehabilitation and services for the disabled, and to a Centennial article on Social Welfare. An article entitled "Traffic Accident Prevention" was prepared for inclusion in the monthly publication.

#### Canada's Health and Welfare

As in previous years continuing activities included the annual revision of the material on health services, rehabilitation and voluntary agencies for the Canada Year Book; maintenance and transmittal of health legislation and regulations to the World Health Organization; preparation of material on public health and rehabilitation services for inclusion in a number of different publications, and compilation of information on various health services and organizations in respect to inquiries from different sources.

#### Health Expenditures, Resources and Special Projects

Research on health expenditures and health resources was an expanding area of activity during the year.

A bulletin entitled "Personal Health Care Expenditures in Canada 1961-1965" was in course of preparation, and nearing completion at the end of the year. An international study of health expenditures by the World Health Organization was reviewed, and plans for further international studies were made. The section prepared health expenditure data to meet a variety of requests for information.

Section staff participated in the work of the Health Resources Fund working party concerned with reporting forms and procedures. This included design of project reporting forms and related instructions, and the design of claims forms. Another function was the compilation of statistics from the five-year development plans submitted by the province. A member of the staff served as Secretary of the Departmental Review Committee to review project submissions.

The Division kept in touch with the proceedings of the Special Committee of the House of Commons on Drug Costs and Prices. Because of current interest in the economics of the pharmaceutical industry, work was done to update statistics contained in the earlier study prepared in the Division entitled "Provision, Distribution and Cost of Drugs in Canada". A new memorandum was prepared entitled "The Cost of Pharmaceuticals and Medicines in Canada, 1961-1965". Its four sections include financial statistics for the pharmaceutical manufacturing industry, data on imports and exports of medicine and pharmaceutical preparations, material on the operation of retail drug stores, and a section dealing with estimates of drug expenditures in Canada.

Staff from all sections assisted in special projects such as the Canada Year Book Chapter on "Public Health, Welfare, and Social Security". The annual report "Health and Welfare Services in Canada" was produced for public distribution. At the request of the Department of External Affairs, a special paper was prepared on "Health, Welfare and Social Security Programs in Canada".

The annual questionnaire survey of socio-economic research projects in the health field in Canada in 1966 was completed, and the responses were compiled for publication. This project serves as a useful means of disseminating information on current research endeavours across Canada.

A member of the staff was assigned on a part-time basis to conduct economic studies of a general nature for the Minister of National Health and Welfare.

Staff members, including the Director of Research and Statistics, conducted lectures and seminars on such topics as "research methodology" and "health economics research" for groups such as students at the University of Toronto Schools of Public Health and Hospital, Administration, and students at l'Ecole d'Hygiène of the University of Montreal. A set of statistical tables on health economics data for Canada was brought up-to-date.



## WELFARE RESEARCH

### Public Assistance and Family Services Section

During the year a number of projects were continued and several publications and articles were prepared.

The Section continued to give staff service to the project on welfare statistics. The supervisor served on the departmental committee on welfare statistics and was responsible for assisting with the drafting of statistical forms for discussion with provincial representatives. The supervisor also participated in a federal-provincial conference, chaired by the Director in February 1967.

Preliminary work was done on child welfare statistics and a draft questionnaire was submitted to the provinces on an experimental basis to determine the availability of basic comparable statistical data.

Articles were prepared for the Human Rights Yearbook, 1965; for Canada's Health and Welfare on the "Report of the U.S. Advisory Council on Social Welfare"; and for the Labour Gazette on major changes in legislation in general assistance. Several articles on social welfare were reviewed and brought up-to-date, including material for the Canada Year Book.

The following studies were completed and distributed: English and French editions of Changes in Legislation in General Assistance, Mothers' Allowances, and Living Accommodation for the Elderly in Canada, 1964 and 1965 and the Research and Statistics Memo, entitled "Statistical Information on Canadian Schools of Social Work, Academic Year 1964 and 1965 and as of November 1, 1965".

In response to questionnaires from the United Nations two reports were completed: The Biennial Report on Changes and Developments in Family, Youth, and Child Welfare 1964 and 1965; and the Report on the Organization and Administration of the Social Services in Canada.

The Section also provided technical and consultative services to officers within the Department and to other Departments. The Section reviewed and assessed applications for welfare research grants, a member served on the Research Advisory Committee, and the Section provided other consultative services on research projects as required. A number of special memoranda on various aspects of assistance programs were prepared for use in the Department or in the Directorate.

Staff members of the Section served on the following committees: the National Committee on Visiting Homemakers of the Canadian Welfare Council; the editorial committee of "Bien-être social canadien", published by the Canadian Welfare Council.

Members of the Section attended the Annual Meeting and Conference of the Ontario Welfare Council in Toronto, in May 1966, the Canadian Conference on Social Welfare in Vancouver, B.C. in June 1966, and the National Conference on Maternal and Child Health, held in Ottawa in March 1967.

#### Section on Aging

Increasing demands have been placed upon the Division throughout the year in relation to matters of concern to the aged and aging. In part, at least, these may be attributed to the attention focused upon the older segment of the population by the first Canadian Conference on Aging (January 1966) and the Report of the Special Committee of the Senate on Aging (February 1966). Because the Division now has a Consultant on Aging on its staff, it has been possible to respond to requests made to it for special assistance by both public and private agencies. Indeed the "export" of service has expanded.

The Consultant has served as a speaker and resource person at two provincial conferences on aging and one on social welfare, and has spoken at a conference for older persons, and a seminar, an annual and a regular meeting of senior citizens' organizations. She participated in a panel on pre-retirement preparation organized by the Canadian Pension Conference. She served as guest lecturer for a refresher course for public health nurses at Queen's University and in the program of the School of Hospital Administration at the University of Ottawa. In addition, she addressed two groups of volunteers at special meetings. Radio and television as well as press interviews have provided opportunities to participate in public education.

Visits to programs in the Atlantic Provinces, in the three Prairie Provinces, in the State of Utah, and in Montreal, Philadelphia and Ottawa, as well as attendance at the annual meeting of the National Council on the Aging in New York and the biennial meeting of the American Association of Retired Persons in Salt Lake City, have allowed the Consultant on Aging to learn about programs, and permitted the sharing of information. Her services have been made available to individuals and to a variety of agencies, including business and industry, through interviews and through correspondence in such areas as pre-retirement preparation, housing and living arrangements for the aged, organizing in the community to meet the needs of older people, and the involvement of the senior citizen in community development and participation.

The Consultant on Aging is a member of the Canadian Welfare Council's Committee on Aging and a consultant to its Executive Committee. Provincial governments have requested her assistance and she has worked with other departments of the federal government on matters pertaining to older people. Within the Department of National Health and Welfare she has prepared material upon request for various Directorates, and serves as liaison with the Health Branch in those areas of common concern in the field of aging.



## Special Projects Section

**Welfare Manpower** Inasmuch as the survey of welfare positions and manpower, originally planned as a nation-wide survey, will now apply to only eight provinces the project has had to be reviewed in terms of methodology and design. In particular, the questionnaire is being reconsidered and adapted so that it will yield data common to the total area to be covered and specific data which individual provinces might wish to have for their own purposes. Basic materials relating to the conduct of the survey were discussed with five representative private agencies. On invitation they offered criticisms and suggestions which will be helpful in achieving the main objectives of the survey.

**Inventory of Welfare Research** During the year definite steps were taken to make available to Canadian welfare research workers and the welfare community generally a comprehensive inventory of welfare research projects currently under way or recently completed. In the main the inventory will be confined to Canadian welfare research, but it will contain also selected reference to research outside of Canada. The principal purpose of the inventory is to assist in the co-ordination of welfare research in Canada, and thus help to reduce unnecessary duplication of research effort and to identify gaps in welfare research. The inventory will include research projects supported through the Welfare Grants program as well as those supported by community organizations and private foundations in Canada and abroad, and those not receiving any financial support.

**Departmental Services** Members of the Section assisted in appraising research applications for financial support from the Welfare Research Grants.

The staffing of the Division up to full strength continued to occupy much time and energy, and yet a number of important vacancies remain to be filled.

The Principal Research Officer continued to be a member of the Committee on Planning and Priorities of the Vanier Institute of The Family and attended several meetings of the Committee during the year.

He also assisted the International Welfare Division in reviewing and appraising documents as background support for Canadian position statements to the United Nations Commission on Social Development, meeting in New York in March.

## SOCIAL SECURITY RESEARCH DIVISION

Research has continued during the year on family allowances, private pension plans, Canada Pension Plan statistics, old age income maintenance measures, international aspects of social security and in the general area of social security. Three professional members including the Principal Research Officer left the Division to accept appointments in other areas of the federal government service. No replacements had been made to the staff by the end of the year. Research was carried out on a new income maintenance program for old age security pensioners called the Guaranteed Income Supplement program. This program became operational in January 1967. The Division prepared one bulletin, a Research Memo, two global reports, a paper for the 16th General Assembly of the International Social Security Association, many other studies and memoranda, and completed a paper on Canada Pension Plan benefit statistics.

### Social Security Programs

During the year the Guaranteed Income Supplement program was established and became operational in January 1967. Members of the Division were actively engaged in studies, preparation of memoranda, and calculation of cost estimates and projections dealing with the new program. A member of the Division attended meetings of the departmental planning committee and of an interdepartmental committee formed to consider this proposal. Two members of the Division served on a committee established in the Directorate to develop a proposal on statistics for the GIS program. Work on this statistical program has now started, and a member of the Division advises and assists the Biostatistics Division in the implementation of this program.

A member of the Division served during the year on an interdepartmental Task Force which is examining the Family Allowance record system for data linkage, attended meetings of this committee, interviewed officials in Ottawa and Toronto, and assisted by undertaking studies in connection with the work of the committee and in preparing a progress report on the work of the Task Force. Members of the Division attended meetings of the Interdepartmental Sub-committee on Data Linkage held in June 1966 and in March 1967. A member of the Division attended the Federal-Provincial meetings on Welfare Statistics held in Ottawa in December 1966. Background papers were provided for the use of the Deputy Minister of National Welfare in preparing an article for the centennial issue of the Canada Year Book dealing with a century of social welfare in Canada and for preparing his speech on social security in Canada to the 8th ILO regional conference of the American States Members held in Ottawa in September 1966. A bulletin was prepared on the Disabled Persons Allowances program for the fiscal years 1960-61 to 1963-64. The Minister has approved the publication of the Quarterly Statistical Bulletin. Preliminary planning for the first issue has been undertaken.



## Canada Pension Plan

Members of the Division took an active part in the preparation of basic memoranda on contribution statistics and benefit statistics under the Canada Pension Plan. Draft regulations were prepared on the Pension Index and Earnings Index, and a flow chart was developed showing the conditions underlying benefits payable. Continuing discussions were held with the Director of Research and Statistics of the Régime de Rentes du Québec (RRQ) on statistical programs and problems of mutual interest to both plans. Agreement was reached with the RRQ to standardize definitions, concepts, semantics, and statistical tables for both the CPP and RRQ. The paper prepared on Canada Pension Plan benefit statistics was discussed with officials of the OASDHI administration in Washington in July. A member of the Division served on the Special Operations Committee of the Canada Pension Plan set up to develop operating forms and systems for use in the Canada Pension Plan Administration. The Committee developed 13 forms and a manual of operating procedures. A member of the Division also worked on a boundary study for the Canada Pension Plan Administration for purposes of defining the boundaries of the district offices to be established under the Canada Pension Plan Administration. A pilot project on benefit statistics for the Canada Pension Plan was proposed and is to operate for an initial two year period. Preliminary work has started on this project. The purpose of the pilot project will be to further develop and define the benefit statistics program for the Canada Pension Plan so that the program can be used on the CPP computer without having to revise and modify it following computerization. Work continued during the year on the development of concepts, classification codes, and statistical tables for contribution statistics in connection with the Canada Pension Plan.

## Financial Analysis and Private Pensions

Studies were continued on private pension plan legislation. A global report was prepared on this subject by a member of the Division. Members of the Division consulted with and advised officials of the Dominion Bureau of Statistics in connection with their planning of a survey on private pension plans in Canada. The Division participated in an interprovincial conference on Uniform Pension Legislation held in Toronto in December 1966; and in meetings of the Canada Pension Conference held in Toronto in September 1966 on the experience in integrating private pension plans with the Canada Pension Plan, and in Montreal in February 1967 on the problems of aging. Research and analysis continued during the year on social security expenditures in Canada and outside of Canada. Tabular material on expenditures by the Government of Canada and by all levels of government in Canada for fiscal years 1958-59 to 1966-67, inclusive, were revised and completed during the year. Material was prepared on social security expenditures, statistical data on social security programs, and on program descriptions for the Canada Year Book and Health and Welfare Services in Canada. In addition, several graphs were prepared for the Canada Year Book. A research Memo was prepared for publication comparing social security expenditures by the various levels of government in Canada, Australia, New Zealand, Great Britain and the United States for the fiscal years 1959-60 to 1964-65 inclusive.

## International Social Security

Studies were carried on during the year on international aspects of social security. Replies were prepared in the Division to ISSA questionnaires on: social security for the public service; relationship between the risks of old age and invalidity; and investment of old age invalidity and survivors insurance funds. The Division prepared basic memoranda on the ratification of ILO Convention 118; studied and reported on problems of standard beneficiaries and the measurement of the adequacy of social security expenditures in Canada with respect to the ratification of ILO Convention 102; prepared a memorandum on the revision of ILO Conventions 35 to 40 inclusive; and prepared a memorandum outlining Canada's position on the proposed new ILO Social Security Convention which, if adopted, will replace ILO Convention which, if adopted, will replace ILO Conventions 35 to 40 inclusive. A study was prepared on two recently introduced income maintenance programs in the United Kingdom: the earnings related supplements to short term benefits, and the non-contributory benefit scheme. A global report was prepared describing the history and functions of the International Social Security Association. A member of the Division attended the 93rd Annual Forum of the National Conference on Social Welfare held in Chicago May 26 to June 2, 1966 dealing with the problems of poverty in the U.S.A., and the 4th and 5th meetings of Actuaries and Statisticians of the International Social Security Association held in Paris, France in October 1966.

A paper called Social Security in Canada was prepared for distribution at the 16th General Assembly of the International Social Security Association held in Leningrad May 10-20, 1967. This paper, which will be printed in English, French, and Russian, describes the different social security measures available for specific population groups in Canada.



## BIostatISTICS DIVISION

In the fiscal year 1966-67, the Biostatistics Division completed several projects and developed and introduced several new projects and programs. These included new studies with the Dental Health, Nutrition, and Radiation Protection Divisions, development of the Congenital Anomalies Surveillance System with Child and Maternal Health and development of field health surveys with the Occupational Health Division. Assistance was given in developing new statistical systems for the Canada Pension Plan and the Canada Assistance Plan, and work was initiated on a statistical program for the Guaranteed Income Supplement Program introduced in January 1967. The Division cooperated with other Divisions in the Directorate in the continuing development of statistical systems and methods, and extended its services to the Health and Welfare Branches of the Department. Liaison was set up with the newly established Management Services Division with regard to departmental computer services.

### EPIDEMIOLOGY

A major project completed during the year, on a joint basis with the Epidemiology Division by the Medical Statistics Unit, was the Canadian Study of Smoking and Health. A summary of the study was presented to the Canadian Public Health Association in May 1966 by the Chief of the Epidemiology Division (this summary is to be published in the Canadian Public Health Association Journal), and the Final Report was released by the Department during the year. The response to this Report from both within Canada and abroad indicates that it was well received by others working in the same field. A Research Memo "Trends in Death Rates for Diseases of Interest in Relation to Smoking, Canada 1950 to 1964" was also published and distributed during the year. A second progress report was prepared on the study of Chronic Bronchitis cases among D.V.A. pensioners.

Assistance was given on a committee studying the feasibility of developing a National Cancer Register in Canada. An extensive study was made of the subject and proposals developed. An article concerning cancer registers was prepared for "Canada's Health and Welfare".

A study of morbidity and mortality from chronic respiratory disease in association with the Asbestos Mining industry in Quebec communities was completed and presented to the Steering Committee on the Biological Effects of Asbestos. Assistance was given to the Epidemiology Division in developing a statistical review of epilepsy in Canada for a departmental committee meeting on the subject. Assistance was also given in completing the statistical analysis of an epidemiological study of histoplasmosis in Ontario.

In consultation with the Epidemiology Division, the Medical Statistics Unit continued to develop the statistical laboratory record systems for Salmonella and Virus Isolations. Modifications were developed in the coding and analysis of virus isolations and periodic and annual reports were prepared at the request of the Epidemiology Division. The optical scan record system for Salmonella was successfully introduced during the year, and a nine-month report, including new epidemiological analysis of the system,

was presented to the Annual Laboratory Directors' Conference. The system was also reviewed by the Advisory Committee on Epidemiology. The annual report was also developed in draft form.

## HOSPITAL INSURANCE

The statistical tables for the Minister's Annual Report on Hospital Insurance for 1964 were prepared and published. The preliminary statistical report of hospital insurance for 1965 was presented to the Advisory Committee on Hospital Insurance. The usefulness of the report was reviewed with the Committee by the Director and there was general support for the view that the report should be continued but made available at an earlier date. A Research Memo dealing with automation and laundry services in large Canadian Hospitals was printed during the year. A study of surgical services in large hospitals was also completed during the year. A study of the diminishing birth rate and its effect on hospital utilization and hospital beds was also prepared in draft.

Considerable time of the Principal Research Officer and the senior statistician, Hospital Statistics, was taken up through their joint participation in the preparation of the 1968 revision of the annual reporting forms for hospitals under the Hospital Insurance and Diagnostic Services Act. They served on a continuing committee with representatives from Hospital Insurance and the Dominion Bureau of Statistics in developing the draft forms. Development of the revision involved consultation by the Federal Committee with many agencies including the Child and Maternal Health Division, Radiation Protection Division, and Medical Rehabilitation Division in the Department, the Canadian Nurses' Association, the Canadian Hospital Association, Woods Gordon and Co. (which undertook the revision of the hospital insurance accounting manual), and the Canadian Physiotherapy Association. Individual consultations were also undertaken with representatives of provincial plans. They served on Expert Working Parties which reviewed the draft proposals and participated in the review of the drafts by the Sub-committee on Finance and Accounting and the Sub-committee on Quality of Care, Research and Statistics of the Advisory Committee on Hospital Insurance.

The statistician in charge of work function studies in hospitals continued to cooperate with the Nursing Consultant in Hospital Insurance in carrying out such studies in hospitals across Canada. Work was completed on the studies at the Moncton City Hospital and the Prince Albert General Hospital, and the coding and analysis was largely completed for the St. John's General Hospital in Newfoundland. Sampling schedules were developed for the Regina Grey Nuns' Hospital and the Hospital for the Mental and Nervous Diseases in St. John's, Newfoundland.

A comparative analysis of the nursing functions in various hospitals was undertaken as part of a study to develop standardized definitions of nursing functions in the hospital field. A doctoral student, employed during the summer, undertook and completed revision of the nursing functions code under the direction of a Committee including the Nursing Consultant, Hospital Insurance, the Nursing Study Statistician and the Principal Research Officer, Biostatistics.



During the year, a review of recent research projects relating to the hospital field in Canada was undertaken. Information was provided through the Provincial Hospital Insurance Commissions and the three Schools of Hospital Administration. A summary listing of the abstracts is now being prepared. The senior statistician, Hospital Statistics, served on a Committee in Montreal to study the application of computers to Hospital Administration. Comments were prepared concerning a study of drug utilization in hospitals.

## OCCUPATIONAL HEALTH

Several statisticians actively assisted the Occupational Health Division during the year. The Division received the data from the field Household Sickness Surveys, the health questionnaires, the smoking and occupational history questionnaires, and the pulmonary functions studies undertaken by Occupational Health at Yellowknife and selected areas of Newfoundland. Supporting data from physician and hospital services were also incorporated into the study. Analysis was undertaken initially of the data from the Yellowknife area, and a preliminary review was undertaken of the physicians' records from Newfoundland.

Continuing assistance was given in the study of the health hazards in the asbestos industry. A summary review was prepared of the methods and findings of the Detroit-Windsor Study of the Effects of Air Pollution on Health, and advice was given concerning planning of a new proposed study of the effects of air pollution on health at the request of the International Joint Commission.

Statistical analysis was undertaken of the data from a study of the work functions of occupational health nurses in Ontario. The study was undertaken jointly and in continuing consultation with the Occupational Nursing Consultant of the Ontario Department of Health, Industrial Hygiene Branch. A review was made of statistical data relating to the role of women in industry. For the National Farmers' Union, a review was undertaken of factors relating to health and productivity in Canada. Assistance was given in the analysis of experimental data derived from animal experiments concerning the toxicity of impurities found in industrial solvents.

## DENTAL HEALTH

In cooperation with the Dental Health Division, work was initiated on a study of the Effective Demand for Dental Services in the population. Records were received from participating dentists, optical scan cards were designed, and codes were developed for coding the data collected. Statistical analysis of a pre-fluoridation survey in Paris and a control community was completed during the year. A report was prepared covering the first phases of this survey. In cooperation with the Labour Force Survey Unit of the Dominion Bureau of Statistics, the Principal Research Officer of Biostatistics, as a member, assisted the Advisory Committee on Dental Health statistics to initiate a survey of Dental Care in Canada. Further plans were also discussed by the Committee for development of the Canadian Dental Health Index.

## RADIATION PROTECTION

The final report of the second milk survey undertaken through Canadian Facts, an opinion survey organization, was completed during the year and the results were published in R.P.D. Report No. 50. The coding of the film monitoring data for the years 1961 - 1963 was completed and preliminary statistical analysis of the data was undertaken. Some analysis was also carried out of the 1964 and 1965 film monitoring data on the Univac Computer. A study of the radioactive materials in powdered milk was completed. The method of coding the nutrition data from a study of teenage dietary habits in relation to their intake of cesium 137 and potassium retention in humans was also developed. An analysis was completed of the survey of radioisotope services in Canadian hospitals. The Consultant Statistician, Radiation Protection, carried out a methodological assessment of the statistical problems involved in evaluating thoro-trast, a contrast medium previously used in radiography, as a carcinogenic agent.

## POISON CONTROL PROGRAM

This was a very active year for the Poison Control Program. The use of optical scan reporting cards was extended to all the Poison Control Centres across Canada. A meeting was arranged with the Poison Control Directors to discuss the use of the new forms. This liaison enabled Biostatistics to develop closer contact with individual Poison Control Centres and a number of special requests for poison control data were handled during the year. Particular interest was expressed in grain pesticides, insecticides and barbiturates.

The 1964 Report of the Poison Control Program was completed and published during the year. This report was printed with a hard cover and included a seven-year analysis of the statistics of the program. Reports were also prepared individually for Ontario and British Columbia. Work was relatively advanced on the development of the 1965 report. A brief review was also made of the Adverse Drug Reaction Program of the Food and Drug Directorate and plans were tentatively developed for extension of the statistical analysis procedures from Poison Control to this new program.

## ACCIDENTS

Continuing review was made of the statistical data in the field of motor vehicle accidents in the preparation of a draft bulletin. Liaison was maintained with the Traffic Injury Research Foundation and consideration was given to a study of driving skills and practices in relation to traffic accidents. The Division was also consulted on a study concerning traffic accidents among diabetics.

Work was continued with the Consultant in Aerospace Medicine concerning a proposed study of medical disabilities of pilots as factors in aircraft accidents. Several meetings were held with D. O. T. officials and final arrangements were made to initiate the study with official approval of both Departments.



## CONGENITAL ANOMALIES

At the Seventh meeting of the Expert Committee on Congenital Anomalies, a proposal was made by the Principal Research Officer, Biostatistics, to develop an optical scan record for the Congenital Anomalies Surveillance System. This proposal was approved by the Committee and detailed planning was instituted to develop the statistical aspects of the surveillance system.

## MORBIDITY

The Division continued to prepare its annual review of hospital morbidity based on the ten standard tables recommended by the Advisory Committee on Hospital Insurance. The 1964 report was completed and work was relatively advanced on the development of the 1965 statistics. Several special analyses were prepared of hospital morbidity data, including a draft bulletin reviewing hospital morbidity from heart disease for the period 1960 - 1964. Computer applications for morbidity statistics were explored in depth and a generalized program to evaluate morbidity trends by computer techniques was developed in draft.

Considerable study was given to the 1968 revision of the I.C.D. with particular reference to its application to congenital anomalies, accidents, poisonings, and infectious diseases. Presentations were made by the Principal Research Officer to the Advisory Committee on Epidemiology and to the Sub-Committee on Quality of Care, Research and Statistics, of the Advisory Committee on Hospital Insurance. This latter group set up a working party to revise the 98 categories of the Canadian Hospital Morbidity List. The 1965 Annual Reports on Morbidity Statistics for the Territorial Hospital Insurance Services and the Yukon Hospital Insurance Services were completed and copies were distributed.

## OTTAWA UNIVERSITY

The two senior statisticians, Medical Statistics, and the Principal Research Officer continued to participate in a teaching capacity in the seminars for 4th year medical students at Ottawa University throughout the year. Consultation was given with respect to research projects undertaken by the Department of Preventive Medicine relating to the study of morbidity and mortality and the regional distribution of heart disease in Canada.

## OTHER HEALTH PROJECTS

The study of normal hemoglobin values developed to the stage of a draft report in consultation with the Laboratory of Hygiene.

Demographic and morbidity data relating to the Maritimes was prepared for a Nursing Conference.

During the year a number of visitors were received from Canada, England, the West Indies, France, India and Indonesia.

## MANPOWER

During the year plans were developed in cooperation with the Canadian Medical Association for gathering information concerning physicians to meet departmental needs. The Department was requested to make a study of the immigration and emigration of physicians in and out of Canada. The Biostatistics Division was asked to develop this study and various sources of data were examined and some basic information was collected by the Manpower Statistician.

Within the Department itself, extensive discussions had been proceeding regarding the need for new up-to-date information on the supply and training of physicians. The publication of Medical Manpower in Canada, in 1964 had made the results from the 1962 survey generally available, and there was a recognized need to develop more current estimates to serve as a background for planning the medical resources required under the proposed Medicare legislation passed in 1966.

The development of a physician's survey questionnaire involved continuing cooperation between the Canadian Medical Association, the Research and Statistics Directorate, and the Medical Care and Medical Services Administration of the Department. The survey is to be carried out during 1967.

Progress was also made during the year in developing the survey of the Demand for Social Workers in Canada, and consultation was given to the Welfare Division in this survey. Discussions were held with the Federal Department of Manpower concerning their Professional, Scientific, and Technical Manpower Survey, 1967, in Canada with reference to the professions serving in health and welfare programs. It was agreed that continuing liaison needed to be maintained. An activity study of the functions of Public Health Personnel in two public health units of Ontario were analyzed during the year as part of a study undertaken for the Canadian Public Health Association.

## WELFARE

### Welfare Research

The staff of the Biostatistics Division served as consultants with regard to the design and evaluation of several applications for grants under the Welfare Research Grants. Consultation was also provided with respect to the development of studies of poverty and poverty indices. The Principal Research Officer participated in a visit to the Office of Economic Opportunity in Washington to study the statistical reporting program, and the socio-economic indices being developed under this program. Some advice was also given concerning the interdepartmental research study on day care in Canada.



## Physical Fitness

Continuing consultation was provided to the Fitness and Amateur Sport Directorate. The consultant statistician assisted in the design and evaluation of a Study of Hockey in Canada. Editorial assistance was given to the Study Committee on Hockey of the Advisory Committee on Fitness and Amateur Sport. Continuing liaison was maintained with respect to the Department of Justice concerning the alleged infraction of copyright of the Wetzel Grid.

## Uniform Welfare Statistics

In cooperation with the Welfare Division, the draft Welfare Statistics tables, previously reviewed by the Federal-Provincial Welfare Statistics Committee, were revised in accordance with the recommendations of the Committee. New drafts were submitted to the provinces late in December 1966, and a second meeting of the Federal-Provincial Welfare Statistics Committee was held in Ottawa. With further revisions recommended at that meeting, the proposed tables developed for reporting under the Canada Assistance Plan were found to be generally acceptable to most of the provinces.

## SOCIAL SECURITY

### Canada Pension Plan

The Principal Research Officer cooperated with the statistician for the Canada Pension Plan in developing the statistics for this program. A meeting was held with the Canada Pension Plan Unit of the Comptroller of the Treasury which has the responsibility for the administration statistics of the program. It was agreed that the Research and Statistics Directorate would develop the benefit statistics program as a pilot project for the first two years, using the resource data required for the administration of the program. A meeting was attended also with the Director of the Canada Pension Plan to review the broad proposals for benefit statistics under the Canada Pension Plan. A meeting was also attended with the statistical representative from the Quebec Pension Plan to consider the factor of comparability with their statistical programs.

The statistics proposed earlier for contributors under the Canada and Quebec Pension Plans were also reviewed. Progress was made with the Department of National Revenue in standardizing the proposed tables on income for computer processing by National Revenue. The proposed tables on earnings to be produced by the Comptroller of the Treasury were also reviewed but progress was only reported regarding statistics concerning the Canada Pension Plan Fund. A meeting of the Sub-Committee on the Statistics for the Canada Pension Plan to report current progress was also attended.

## Guaranteed Income Supplement Program

Prior to the introduction of the Guaranteed Income Supplement Program, detailed consideration was given to a proposed study of the Low Income Aged in Canada, at the request of the Deputy Minister of Welfare. Consultation was maintained with the Director concerning the proposed reporting procedures under the proposed program. The Division was asked to develop sample statistics for the program in accordance with proposals developed by an Intra-Directorate Committee on the Statistical Requirements of the Guaranteed Income Supplement Program. A start was made on processing the sample of returns received under this program, including extensive consultation with the Central Data Processing Services Bureau.

## Task Force on Family Allowances

The Principal Research Officer served on the Sub-Committee on Data Linkage and was named to a Task Force to study the possible computer applications under the Family Allowances Program. This committee met several times including a visit to the Administrative Offices of the Ontario Region and a progress report was prepared for the Sub-Committee on Data Linkage.

## STATISTICAL ORGANIZATION AND METHODS

### Surveys

On behalf of the Department, detailed consideration was given to the departmental needs for use of a proposed second sampling frame to be developed by the Dominion Bureau of Statistics in conjunction with the Labour Force Survey. Assistance was provided in developing two applications in this area during the year. Consideration was given to a proposal by York University to develop a Survey Research Centre. Detailed consideration was given to the methodology of a proposed survey of Consumer Income and Expenditures by D. B. S. in the light of the requirements of the Health and Welfare Branches of the Department. Detailed consideration was also given to a proposed income and expenditure survey of low income families in Canada by the Canadian Welfare Council. A panel discussion regarding the need for uniform statistics on welfare and related demographic data sponsored by the Community Chest Councils Committee was attended in Quebec City.

### Expert Committee on Socio-Economic Statistics

The Principal Research Officer continued to serve on the Expert Committee on Socio-Economic Statistics and the Sub-Committee on Data Linkage. An official from the Social Security Administration in Washington reported to the Sub-Committee on a Data Linkage Statistical Study carried out in the U. S. A. Proposals for data linkage of statistical data in the Canadian government were also received. Special consideration was given to linkage methods and confidentiality.



## Machine Methods

The Univac optical scan system within the Division was exploited more fully during the year and adapted to several projects. In consultation with Central Data Processing Services, a detailed study was made of the Digitek optical scan system and a seminar was conducted for Biostatistics by the Central Data Processing Services.

The applicability of computers to the Division's work continued to receive careful study. Some progress was made in developing Fortran programming for hospital morbidity evaluation. Several courses on computer applications were attended by the staff during the year. Assistance was given in developing several projects for computer application outside the Department. Serious planning also proceeded towards the integration and development of data processing services within the Department. In consultation with the Management Services, plans were developed for the installation of a medium-sized computer within the Department as recommended earlier by the Division. Study was made of the Massager programs and the Data Bank developed by the Economic Council of Canada. Discussions were also held with the Univac representatives regarding proposed conversion from 90-column to 80-column punch cards.





The departmental library is now in new, spacious quarters in the Vanier Building.



The Secretarial Services Section of the Office and Secretarial Services Division is one of the busiest in the Department of National Health and Welfare.



## ADMINISTRATION BRANCH

### Introduction

The Administration Branch underwent considerable reorganization and altered its orientation to become, essentially, an advisory body. A Director General, Administration, was appointed, the personnel, financial and materiel administration functions were greatly strengthened, and an internal management consulting service was established. Plans were developed, and implementation started to provide an effective level of support service to departmental programs which were growing in number and complexity.

Departmental Management committees were formed and attention was focussed on bilingualism and biculturalism by virtue of a newly-formed senior management committee on bilingualism and biculturalism.

By the end of the year, detailed plans had been developed for substantial delegation of authority and program branches had developed plans for supporting administrative service.

The Administration Branch is composed of the following directorates and divisions: Financial Administration, Departmental Library, Management Services, Materiel Services, Office and Secretarial Services, Personnel Administration, Registry Services.

### FINANCIAL ADMINISTRATION

The Financial Administration Directorate was established and a Director, Financial Administration, appointed in January.

Four major goals were pursued by the Directorate in 1966.

The first goal was the completion of the Financial Management Project recommendations for the introduction of the new concepts of financial management and was substantially accomplished.

The second goal was to provide the specialist skills required for implementation of the new financial management concepts within the Department. A new form of organization was defined for the Financial Administration Directorate and established. Assistance was provided to Branches to assess their requirements for specialist staff in the area of financial administration. Position definitions were completed for most branches and recruitment action started.

The third goal was to provide a smooth transition from the provision of financial advice by the Departmental Secretary to the provision of financial advice by the Director, Financial Administration. During the year, the Director, Financial Administration assumed the responsibilities

of the Department's senior financial advisor and carried out special projects on behalf of the Deputy Ministers and the Director General, Administration, from time to time.

The fourth goal was to ensure that the Directorate continued, during a period of changing organization, to provide a centralized accounting advisory service designed to assist Directorates and Divisions (other than those of the Medical Services Directorate) in the development of budgets and management of funds, to carry out much of the detail involved in the preparation of the departmental Estimates and to act as a liaison between the Department and the Treasury Office.

## DEPARTMENTAL LIBRARY

The Departmental Library continued with the selection, acquisition and organization of reference and technical books, serials, pamphlets and government documents related to the Department's interests. During the course of the year it was decided that the Library should move to more spacious quarters so attention was given to specifications, estimates and plans of space to accommodate the collection, as well as arrangements to meet the needs of departmental staff in other buildings.

A representative from the Library was a member of a group that visited the editorial offices of the American Chemical Society in Columbus, Ohio, in connection with a study of the computerized form of Chemical-Biological Activities. Another Library representative attended meetings in Toronto to consider the application of the new Anglo-American Cataloging Rules.

A number of reports on various aspects of health science library information networks were prepared for the Chairman of the Health Communications Committee of the Health Branch. A representative from the Library was a member of a group that visited the (U.S.) National Library of Medicine and the Office of the Surgeon General of the (U.S.) Public Health Service in connection with health communications studies.

## MANAGEMENT SERVICES

The Management Services Division, established to provide a management consulting service to all elements of the Department, became operational in January. The initial staff of three analysts was increased to eight during this first year of operation. Assignments in the following areas are undertaken:

1. The analysis of existing operational and administrative procedures and the development of new processing techniques.
2. The development of new systems and procedures required for the introduction of new or changed programs.



3. The conduct of studies to determine the feasibility of electronic data processing equipment.
4. The development of clerical work study methods and the introduction of related management control reports.
5. The evaluation of operational needs in terms of space, office equipment and other resources.

The Management Services Division has been staffed with analysts who are trained and experienced in the various management techniques including systems and procedures, organizational analysis, electronic data processing, work study, and forms design and analysis.

During its first year of operation, the Division undertook some twenty projects and initiated a forms management program. The major studies which were undertaken during the period included an Organization and Methods Analysis, European Region, Medical Services; Analysis of Accommodation Requirements, Head Office; Transfer of the Purchasing Function to the Department of Defence Production, and the Re-Organization of Materiel Services Division; continuous work measurement studies of the Family Allowances and Old Age Security operation; analysis of data processing requirements within the Department; and a study of systems and procedures for personnel administration. Some of the projects mentioned are still active.

The demand on the resources of the Division continuously exceeds its capacity. Additional personnel resources (particularly in the area of data processing analysis and programming) are now planned to meet the anticipated increase in the number of requests for studies.

## MATERIEL SERVICES

On July 1, 1966, the purchasing function of the Department was integrated with the Canadian Government Supply Service of the Department of Defence Production. Those members of the Division who had been solely concerned with purchasing were transferred to the Department of Defence Production, and those involved in other functions remained with the Department to form the nucleus of the new Materiel Services Division.

The new Division was assigned responsibility for providing the Department with the following services:

- . a materiel management program conforming to Treasury Board policy and ensuring that the Department could meet its responsibilities under the Financial Administration Act,
- . an accommodation planning service,
- . a building management and housekeeping service for the Brooke Claxton Building,
- . a fleet management program,

stationery and office supplies service for the Brooke Claxton Building and other departmental buildings in Tunney's Pasture.

The availability of experienced purchasing agents in the regional purchasing offices of the Department of Defence Production encouraged the Department to effect optimum decentralization of supply operations. The principle beneficiaries of this decision are field establishments of Medical Services whose requirements are now purchased by the nearest regional purchasing office of the Department of Defence Production.

#### OFFICE AND SECRETARIAL SERVICES

The Office and Secretarial Services Division continued to provide administrative support services to all components of the Department. Services provided by various Sections of the Division were as follows:-

- (a) The Parliamentary Papers and Special Projects Section was responsible for the processing of Parliamentary Returns and other documents for tabling in the House of Commons, the daily reading of all parliamentary papers and for the extracting, distributing and indexing of items of interest to the Department. It kept informed of developments in all areas of Federal legislation affecting departmental programs and acted as a source of reference and supply for various legislative documents, Acts and reports required by all areas of the Department. The Section also administered departmental security activities, organized financial campaigns within the Department and acted as an information center for the Department.
- (b) The Secretarial Services Section provided a central typing and transcribing service to the entire Department in Ottawa and was responsible for the preparation of a wide variety of material for reproduction.

The Departmental Telecommunications Telex Message Center was staffed and operated by this Section. During the year Telex traffic doubled in volume, resulting in substantial benefits to departmental communications. A number of shared telex facilities were developed in major cities throughout Canada.

- (c) The Addressograph and Photocopying Section continued to serve all areas of the Department to meet an ever increasing demand for services.

#### PERSONNEL ADMINISTRATION

During 1966-67, an extensive reorganization of the personnel management functions of the Department was commenced. The objective of the reorganization is to transfer many of the administrative functions to



personnel divisions that are being established in four of the largest branches of the Department, and to those departmental establishments across Canada whose size warrants the employment of personnel advisers. The role of the central Personnel Administration Directorate is being altered to focus upon the development of personnel management policies for the Department, on the training and development of managerial personnel, the evaluation of personnel management in the Department, and to liaise on behalf of the Department with the Public Service Commission and the Personnel Policy Branch of the Treasury Board. The functions will be carried out by three divisions that are being formed in the central Directorate. The Manpower Planning Division is being established to forecast the future manpower requirements of the Department, and to develop recruitment and training programs needed to meet the future requirements. A Staff Relations Division has been established to coordinate the Department's responsibilities under the collective bargaining system that was introduced in the Public Service in March, 1967, and to develop policies and plans to promote relations between departmental management and employees that are the most productive in fulfilling the Department's responsibilities. A third unit, the Classification and Pay Division, is concerned with personnel classification and the administration of pay in the Department.

The Department was among the first in the Public Service to establish a position of Adviser, Bilingual Development. An appointment to this position was made at the end of the fiscal year. The objective of this officer is to promote the development of bilingualism and a better appreciation of the cultures of the two founding races in Canada.

The major reorganization described above requires a complete revamping of the methods used for the collection, storage, and processing of personnel data and information within the Department. A study team was formed late in the year under the leadership of the Management Services Division of the Department to develop modern and efficient systems to ensure that personnel data and information are readily available to the officers and supervisors who are being assigned greater management responsibilities with respect to their own personnel within the Department.

The changes that are taking place reflect the commitment of the Department to the improvement of performance through the introduction of modern management concepts and systems. These objectives are reinforced by the new personnel legislation for the Public Service of Canada that came into effect in March, 1967. The preparations for the new personnel management regime have imposed a heavy burden upon those engaged in personnel management in the Department. By the end of the year, the Department had completed a provisional determination of the status of its employees in the Operational Category, under the new collective bargaining system, and was engaged in extending this process to all other officers and employees. The classification revision program, under which an occupational classification system is being introduced for the Public Service in preparation for collective bargaining, was completed during the year with respect to the Administrative Support Category and the Administrative and Foreign Service Category. Also, all positions in the Department that will fall in the future Operational Category have been identified and

evaluated under the new classification standards, and the reclassification of employees in these positions will proceed as soon as the new pay plans for the Operational Category have been developed. At the end of the year, the Department was engaged in describing the positions remaining for conversion to the Technical Category and to the Scientific and Professional Category.

Changes in the Department's programs required a net increase in its establishment of 430 positions. The largest increase, accounting for more than one-half of the Department's increase, was required to build the Division responsible for administering the Canada Pension Plan.

During the year 1,776 appointments were made and 1,695 employees terminated their employment. Sixty-seven officers and employees of the Department undertook training in professional and technical fields at universities and other institutions outside the Public Service. Twenty-two officers of the Department attended administrative and management courses conducted by the Public Service Commission. One hundred and thirty-nine members of the Department attended day-time and evening classes in the French language, and four attended English language classes provided by the Public Service Commission. In addition, a number of training courses and seminars designed to meet specific needs in the Department were conducted by the Personnel Administration Directorate.



TABLE 33

GEOGRAPHICAL DISTRIBUTION OF POSITIONS AS AT MARCH 31, 1967

|                                               | Ottawa | Nfld. | P.E.I. | N.S. | N.B. | Quebec | Ontario | Man. | Sask. | Alberta | B.C. | Y.T. | N.W.T. | O/S | TOTAL |
|-----------------------------------------------|--------|-------|--------|------|------|--------|---------|------|-------|---------|------|------|--------|-----|-------|
| DEPARTMENTAL ADMINISTRATION                   |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
| Office of Deputy Minister (Welfare)           | 4      |       |        |      |      |        |         |      |       |         |      |      |        |     | 4     |
| Office of Deputy Minister (Health)            | 3      |       |        |      |      |        |         |      |       |         |      |      |        |     | 3     |
| Director General, Administration              | 2      |       |        |      |      |        |         |      |       |         |      |      |        |     | 2     |
| Personnel Administration                      | 69     |       |        |      |      |        |         |      |       |         |      |      |        |     | 69    |
| Financial Administration                      | 20     |       |        |      |      |        |         |      |       |         |      |      |        |     | 20    |
| Departmental Audit                            | 2      |       |        |      |      |        |         |      |       |         |      |      |        |     | 2     |
| Matériel Services                             | 26     |       |        |      |      |        |         |      |       |         |      |      |        |     | 26    |
| Management Services                           | 8      |       |        |      |      |        |         |      |       |         |      |      |        |     | 8     |
| Library                                       | 21     |       |        |      |      |        |         |      |       |         |      |      |        |     | 21    |
| Office and Secretarial Services               | 48     |       |        |      |      |        |         |      |       |         |      |      |        |     | 48    |
| Registry                                      | 110    |       |        |      |      |        |         |      |       |         |      |      |        |     | 110   |
| Legal                                         | 7      |       |        |      |      |        |         |      |       |         |      |      |        |     | 7     |
| Research and Statistics                       | 79     |       |        |      |      |        |         |      |       |         |      |      |        |     | 79    |
| Information Services                          | 46     |       |        |      |      |        |         |      |       |         |      |      |        |     | 46    |
|                                               | 445    |       |        |      |      |        |         |      |       |         |      |      |        |     | 445   |
| HEALTH SERVICES                               |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
| Director General Health Services              | 21     |       |        |      |      |        |         |      |       |         |      |      |        |     | 21    |
| Nursing Advisory Services                     | 4      |       |        |      |      |        |         |      |       |         |      |      |        |     | 4     |
| Research Development                          | 5      |       |        |      |      |        |         |      |       |         |      |      |        |     | 5     |
| Epidemiology                                  | 13     |       |        |      |      |        |         |      |       |         |      |      |        |     | 13    |
| Child and Maternal Health                     | 9      |       |        |      |      |        |         |      |       |         |      |      |        |     | 9     |
| Dental Health                                 | 7      |       |        |      |      |        |         |      |       |         |      |      |        |     | 7     |
| Health Education                              | 2      |       |        |      |      |        |         |      |       |         |      |      |        |     | 2     |
| Chronic Illness and Aging                     | 1      |       |        |      |      |        |         |      |       |         |      |      |        |     | 1     |
| Mental Health                                 | 12     |       |        |      |      |        |         |      |       |         |      |      |        |     | 12    |
| Nutrition                                     | 8      |       |        |      |      |        |         |      |       |         |      |      |        |     | 8     |
| Smoking and Health                            | 2      |       |        |      |      |        |         |      |       |         |      |      |        |     | 2     |
| Laboratory of Hygiene                         | 172    |       |        |      |      |        |         |      |       |         |      |      |        |     | 172   |
| Occupational Health                           | 59     |       |        |      |      |        |         |      |       |         |      |      |        |     | 59    |
| Radiation Protection                          | 84     |       |        |      |      |        |         |      |       |         |      |      |        |     | 84    |
| Public Health Engineering - Headquarters      | 63     |       |        |      | 10   | 7      |         | 7    |       | 6       | 5    |      |        |     | 63    |
| District Offices                              |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 35    |
| Aerospace Medicine and Safety                 | 2      |       |        |      |      |        |         |      |       |         |      |      |        |     | 2     |
| Emergency Health                              | 63     |       |        |      |      |        |         |      |       |         |      |      |        |     | 63    |
| Medical Rehabilitation                        | 12     |       |        |      |      |        |         |      |       |         |      |      |        |     | 12    |
| Prosthetic Services - Headquarters            | 2      |       |        |      |      |        |         |      |       |         |      |      |        |     | 2     |
| Field Offices                                 | 10     |       |        | 9    | 5    | 14     | 108     | 16   | 6     | 11      | 27   |      |        |     | 206   |
|                                               | 551    |       |        | 9    | 15   | 21     | 108     | 23   | 6     | 17      | 32   |      |        |     | 782   |
| HEALTH INSURANCE AND RESOURCES ADMINISTRATION |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
| Director General's Office                     | 4      |       |        |      |      |        |         |      |       |         |      |      |        |     | 4     |
| Health Grants                                 | 17     |       |        |      |      |        |         |      |       |         |      |      |        |     | 17    |
| Hospital Insurance and Diagnostic Services    | 32     |       |        |      |      |        |         |      |       |         |      |      |        |     | 32    |
| Health Facilities Design                      | 12     |       |        |      |      |        |         |      |       |         |      |      |        |     | 12    |
| Health Resources                              | 4      |       |        |      |      |        |         |      |       |         |      |      |        |     | 4     |
| Medical Care                                  | 3      |       |        |      |      |        |         |      |       |         |      |      |        |     | 3     |
|                                               | 72     |       |        |      |      |        |         |      |       |         |      |      |        |     | 72    |

TABLE 33 (Cont'd)

|                                         | Ottawa | Nfld. | P.E.I. | N.S. | N.B. | Quebec | Ontario | Man. | Sask. | Alberta | B.C. | Y.T. | N.W.T. | O/S | TOTAL |
|-----------------------------------------|--------|-------|--------|------|------|--------|---------|------|-------|---------|------|------|--------|-----|-------|
| FOOD AND DRUG                           |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
| Headquarters                            | 415    |       |        |      |      |        |         |      |       |         |      |      |        |     | 415   |
| Regions: Eastern                        |        | 3     | 1      | 26   | 5    | 103    | 123     | 28   | 2     | 7       | 45   |      |        |     | 35    |
| East Central                            |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 103   |
| Central                                 |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 123   |
| West Central                            |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 30    |
| Western                                 |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 52    |
| Narcotic Control                        |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
| Headquarters                            | 45     |       |        | 1    | 1    | 4      | 6       | 1    | 1     |         | 3    |      |        |     | 45    |
| Regions: Atlantic                       |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 2     |
| Quebec                                  |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 4     |
| Ontario                                 |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 6     |
| Prairie                                 |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 2     |
| B.C.                                    |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 3     |
|                                         | 460    | 3     | 1      | 27   | 6    | 107    | 129     | 29   | 3     | 7       | 48   |      |        |     | 820   |
| MEDICAL SERVICES (See Notes 1 and 2)    |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
| Headquarters                            | 294    |       |        |      |      |        |         |      |       |         |      |      |        |     | 294   |
| Regions: Eastern                        | 188    | 8     |        | 33   | 4    | 74     | 174     | 303  |       |         |      |      |        |     | 481   |
| Central                                 |        |       |        |      |      |        | 77      |      |       |         |      |      |        |     | 380   |
| Saskatchewan                            |        |       |        |      |      |        |         |      | 276   | 664     |      |      |        |     | 276   |
| Alberta                                 |        |       |        |      |      |        |         |      |       | 232     |      | 77   | 134    |     | 664   |
| Northern                                |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 443   |
| Pacific                                 |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 507   |
| European                                |        |       |        |      |      |        |         |      |       |         |      |      |        | 123 | 123   |
|                                         | 482    | 8     |        | 33   | 4    | 74     | 251     | 303  | 276   | 896     | 507  | 77   | 134    | 123 | 3168  |
| INCOME SECURITY                         |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
| Headquarters                            | 5      |       |        |      |      |        |         |      |       |         |      |      |        |     | 5     |
| Family Allowances, Youth Allowances and |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
| Old Age Security - Headquarters         | 12     |       |        |      |      |        |         |      |       |         |      |      |        |     | 12    |
| Regional Offices                        | 88     | 24    | 10     | 42   | 35   | 206    | 335     | 52   | 51    | 68      | 83   |      |        |     | 906   |
| Canada Pension Plan - Headquarters      |        | 9     | 3      | 10   | 12   |        | 88      | 12   | 12    | 14      | 25   | 3    |        |     | 88    |
| Field Offices                           |        |       |        |      |      |        |         |      |       |         |      |      |        |     | 188   |
|                                         | 105    | 33    | 13     | 52   | 47   | 206    | 423     | 64   | 63    | 82      | 108  | 3    |        |     | 1199  |
| WELFARE ASSISTANCE AND SERVICES         |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
| Office of Director General              | 10     |       |        |      |      |        |         |      |       |         |      |      |        |     | 10    |
| Welfare Grants                          | 11     |       |        |      |      |        |         |      |       |         |      |      |        |     | 11    |
| Public Assistance                       | 38     | 1     |        | 3    | 3    | 5      | 5       | 3    | 3     | 3       | 2    |      |        |     | 66    |
|                                         |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
|                                         | 59     | 1     |        | 3    | 3    | 5      | 5       | 3    | 3     | 3       | 2    |      |        |     | 87    |
| SPECIAL PROGRAMS                        |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
| Office of Director General              | 2      |       |        |      |      |        |         |      |       |         |      |      |        |     | 2     |
| International Welfare                   | 5      |       |        |      |      |        |         |      |       |         |      |      |        |     | 5     |
| Fitness and Amateur Sport               | 18     |       |        |      |      |        |         |      |       |         |      |      |        |     | 18    |
| Emergency Welfare - Headquarters and    |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
| Regional Offices                        | 21     |       |        | 1    |      | 1      | 1       |      |       | 1       | 1    |      |        |     | 26    |
|                                         |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
|                                         | 46     |       |        | 1    |      | 1      | 1       |      |       | 1       | 1    |      |        |     | 51    |
|                                         |        |       |        |      |      |        |         |      |       |         |      |      |        |     |       |
| TOTAL                                   | 2220   | 45    | 14     | 125  | 75   | 414    | 917     | 422  | 351   | 1006    | 698  | 80   | 134    | 123 | 6624  |

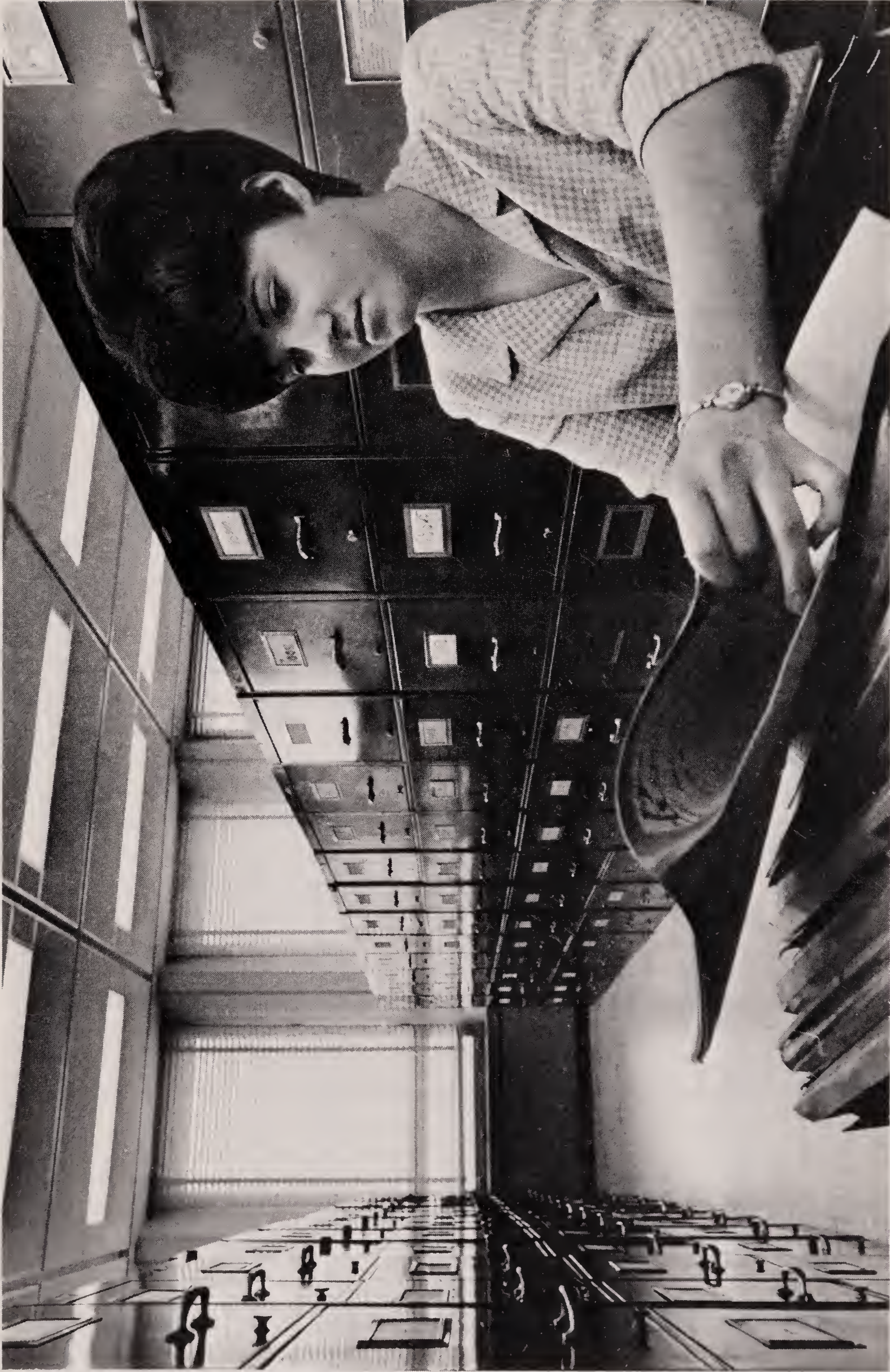
NOTE 1 - Headquarters includes 134 Medical Special, and Medical Officer Pooled Positions which service various locations in Canada.

NOTE 2 - Nursing and Health Aide positions are pooled at the Regional Offices - Ottawa (Eastern); Alberta (Alberta and Northern); Manitoba (Central) Saskatchewan (Saskatchewan); British Columbia (Pacific).









An efficient organization must have a complete filing system. Registry Services has responsibility for the department's files.



## REGISTRY SERVICES

In 1966 the Registry Services Section of the former Departmental Secretary Division became a Division reporting to the Director General, Administration.

The Registry Services Division continued to be responsible for the Department's records management program in Ottawa and for providing advice and assistance in respect of the records programs in many departmental establishments across Canada.

The high standard of the departmental records scheduling and retirement program was maintained during the year, resulting again in substantial savings in space, equipment and staff time. A review of existing retention schedule authorities was continued resulting in authorities allowing for shorter retention periods being approved.

One new sub-registry was established and responsibility assumed for another.

The establishment of new programs and increased activities throughout the Department were reflected in an increase in excess of twenty percent in the volume of correspondence processed by the Registry. The increase in the Quarantine, Immigration and Sick Mariners sub-Registry was approximately forty percent and in the Food and Drug Directorate sub-Registry, in excess of thirty percent.

The general increase in the volume of work and the remoteness of departmental headquarters from other facilities has greatly added to the work of the Departmental Mail and Messenger Services.





Staff of Information Services (Production Section) are seen at work producing camera art for departmental charts.



## INFORMATION SERVICES

In a world where meaningful communication daily becomes more vital to all citizens, the functions of Information Services must become more sophisticated. This requirement is being met by the division as Canada moves into its second century and the dissemination of information poses new and demanding challenges in all areas of communication.

The year 1966-67 was an active and productive one. Many new projects were begun and many others were completed. Here are some of the highlights of the year under review:

**SPECIAL EVENTS** - Members of Information Services were active in arrangements for the First Canadian Winter Games, held in Quebec City, as well as performing public relations duties during the games.

The first Canadian Child and Maternal Health Conference was held in Ottawa under the sponsorship of the Department of National Health and Welfare. A large number of Information Services officers were involved both before and during the conference. Coverage by the news media was extensive and included television interviews with principal speakers of the conference.

The official opening of the Environmental Health Center was held in October, 1966, bringing under one roof the Divisions of Occupational Health, Public Health Engineering and Aerospace Medicine. Information Services Staff was responsible for arrangements for the opening and provided press and other media liaison as well.

The third meeting of the National Welfare Council, for which Information Services Division was responsible for arrangements, was held in the Brooke Claxton Building in Ottawa in January, 1967.

Other special events in which personnel of Information Services participated included the Federal-Provincial Nutrition Council meeting and the meeting of the National Advisory Council on Fitness and Amateur Sport. In addition, officers attended a number of national and international conventions of various health or welfare organizations in order to man displays and provide a line of communication between the divisions concerned and representatives of press, television and radio.

**THE CAMERA AT WORK** - A significant development in the Smoking and Health Program during 1966-67 was the production of five short television clips. Since they have won acceptance by both Canadian networks, they are being shown extensively on public service time. Their cartoon-type approach offers a counter-force to cigarette advertising.

The animated film, "The Drag", was receiving added theatrical distribution as the result of an Academy Award nomination.

The 22-minute, color film "V.D. ? See Your Doctor" has been produced for high school or young adult audiences, preferably to be viewed with a

qualified person to present the film and conduct a discussion period afterwards. It has been well received and has had wide usage.

On the same topic, a color filmstrip has been prepared for showing to blue collar workers. This animated educational filmstrip is captioned in English and French.

Two films were completed for the Fitness and Amateur Sport Directorate. These are "Get Wet", a promotional film on water sports, and "First Canadian Winter Games", a colorful documentary on the Games in Quebec City. Preliminary figures indicate that these films are high on the list of those which are requested by recreational and athletic organizations.

Extensive film footage was obtained during two Emergency Feeding exercises held at the Canadian Emergency Measures College, Arnprior, during the summer. The footage will be edited and adapted for training purposes for future Emergency Feeding courses.

A training film showing how to set up and use the emergency hospital was produced for the Emergency Health Services Division for distribution to the provinces.

A 60-second color television filmclip titled "The ABC's of First Aid" was produced. It shows three basic steps that could be taken to help injured persons. It was produced for Emergency Health Services with the co-operation of St. John Ambulance.

The Biological Photographic Laboratory introduced a new service, scientific cinematography, to provide a much needed and vital facility to various divisions of the Department.

Extensive coverage, in black and white, as well as color, was given by the Photographic Laboratory to the First Canadian Winter Games.

In addition to these, the photographic work of this section included a great many other assignments for many divisions, much of it, as in other years, in the area of biological photography.

The continuing process of procuring, screening, evaluating and withdrawal of outdated films was carried out by the Department's three film libraries. A marked increase in the use of films has been noted over the last five years. During the year under review alone, there were 3,108 bookings on the National Health Film Library, an increase of 20%; the National Welfare Film Library had 234 bookings, an increase of 150% and the National Medical and Biological Film Library with 1,555 bookings showed an increase of 26%.

About 1,700 photographs, slides and transparencies were catalogued for use for displays, publications, news media, conferences and lectures.

THE CONVENTION FLOOR - Two displays were completed for showing at various conventions. They are - "Nutrition - Key Factor for Health",



which tells the story of the work and aims of the Department's Nutrition Division and "The Dark Brown Taste That Lasts", which was prepared for the Smoking and Health Program.

Departmental displays were constructed for a number of important welfare conferences including the National Conference on Social Welfare, in Chicago; the Canadian Conference on Social Welfare in Vancouver; and the International Conference on Social Work in Washington.

A Fitness and Amateur Sport display was also completed for initial showing at the First Canadian Winter Games. It features a turn table and slide projector, outlining the four main parts of the Fitness and Amateur Sport Program: grants to national organizations or for events of nationwide interest; fellowships, scholarships and bursaries; federal-provincial programs; information and consultant services.

THE PRINTED WORD - Several publications were completed for the Emergency Health Services Division. They include "Emergency Hospital Operating Manual", "Environmental Health in Disaster" and "Management of Human Behaviour".

A bilingual pamphlet, explaining the new Guaranteed Income Supplement, was produced to send to all persons in receipt of the Old Age Security pension. Other Welfare publications included "Programs Of Opportunity", produced especially for the Canadian Conference on Social Welfare, and "A Welfare Partnership - Public and Private", for distribution at the International Conference on Social Work.

Manuals completed during the year for the Emergency Welfare Services were "Emergency Lodging" and "Survival Plan for Welfare Institutions". In order to meet the large number of requests for copies of manuals, economy versions of the "Emergency Lodging" and "Registration and Inquiry" manuals were also produced.

Two new booklets which have since been widely distributed were produced for the Fitness and Amateur Sport Directorate. They are "A Program For Everyone", outlining the aims, objectives and methods of operating of the directorate's programs, and "Get Fit - Keep Fit", prepared by a joint committee of the Canadian Medical Association and the Canadian Association for Health, Physical Education and Recreation, outlining the need for physical activity and what to do about it.

Publications for Smoking and Health included "The Canadian Smoking and Health Program", "A Teenager Looks At Smoking", "It Takes More Than Words", "A Vous de Choisir", "La Parole Est Aux Jeunes", and "So I'm Living Dangerously". Also, for the same program, there was a new poster produced in four colors and titled "Toll Road".

A booklet aimed largely at the general public, called "V.D. - What You Should Know", was printed and cited for an award of excellence by the Canadian Public Relations Society.

A new edition of "Deafness in Infants" was produced for the Medical Rehabilitation Division.

A revised version of the well-known book "The Canadian Mother and Child" was turned out for the Child and Maternal Health Division in a smaller, more compact size. A total of 170,000 English and French copies were made available for provincial distribution, with all ten provinces now using the publication. This was the third major revision of "The Canadian Mother and Child" and the 26th printing since 1940. Over this period, some 3.5 million have been distributed to Canadian mothers free of charge.

The Distribution Section figures for 1966-67 are as follows: total number of individual requests received by mail - 16,000; total distribution of publications and posters - 4,466,565 including 2,778,690 English and 1,687,875 French; 10 issues of "Canada's Health and Welfare" with a total of 535,500 copies, of which 354,000 were English and 181,500 French; 12 issues of "One Moment, Please" - total copies being 4,765; 12 issues of "Fillers" totalling 14,050 copies; and 13 issues of "Medical Services Journal", with a total of 3,000 copies. All materials produced by the Department of National Health and Welfare, including printed items, displays, films and filmstrips, are produced in English and French.

THE MASS MEDIA - Information Officers worked throughout the year closely with personnel of newspapers, news services, television and radio stations in telling the story of the Department's various programs. A highlight of the year in this activity was the Emergency Hospital project, involving the sending of 10 Emergency Hospitals to South Viet Nam through the Emergency Health Services Division. Coverage of the event was unusually broad and included photographs of the departure of the first unit and television coverage of the arrival of the first unit in Saigon. Excellent co-operation between Information Services and representatives of the various news media also obtained during the National Child and Maternal Health Conference.

Production of the Department's radio series "Your Health, Your Welfare" in English and "A Votre Santé" in French, and its distribution to private radio stations across Canada, entered its 18th year. More than 75 English and 35 French stations broadcast the series. The ten minute programs in the series are presented weekly, with professional actors and actresses dramatically conveying to listeners helpful and entertaining stories on a variety of health and welfare topics.

Two national advertising campaigns, using daily and weekly newspapers, the ethnic press and radio, were undertaken by Information Services. In June, the campaign was carried out to encourage registration for the Old Age Security Pension, while in January and February an extensive informational campaign was launched to acquaint pensioners across Canada with the provisions of the new Guaranteed Income Supplement program.



## DIRECTORY OF DEPARTMENTAL OFFICERS

### MINISTER

Honourable Allan J. MacEachen, P.C., M.P.

Parliamentary Secretary: Mrs. Margaret Rideout, M.P.

Executive Assistant: J. Bernier

Special Assistant: W.M. MacEachern

Special Assistant: M. McInnis

Private Secretary: Mrs. P. Hunter

Deputy Minister of National Health and Welfare (Health)

John N. Crawford, M.B.E., E.D., M.D., L.L.D.

International Health, Principal Medical Officer:

Dr. B.D.B. Layton, C.D., M.D., M.P.H.

Special Projects, Principal Medical Officer:

Dr. J.B. Bundock, O.B.E., M.D., F.R.S.H.

Deputy Minister of National Health and Welfare (Welfare)

J.W. Willard, M.A., M.P.A., A.M., Ph.D.

### FOOD AND DRUG BRANCH

Director General: R.A. Chapman, B.S.A., M.Sc., Ph.D.

Deputy Director General: Vacant

Assistant Director General, Drugs: M.G. Allmark, B.A., M.A.

Assistant Director General, Foods: D.G. Chapman, B.S.A., M.Sc., Ph.D.

Assistant Director General, Nutrition: J.A. Campbell, B.Sc., M.Sc., Ph.D.

Chief, Narcotic Division: R.C. Hammond, Phm.B.

Chief, Consumer Division: Mrs. E. Margaret Pope

Chief, Statistical Services Division: D.F. Bray, B.S.A., M.S., Ph.D.

Chief, Finance and Administration Services: A.B. Tennenhouse, B.S.A.,  
M.Sc.,

Director, Bureau of Operations: A. Hollett, B.Sc., M.Sc.

Chief, Field Programmes Division: K.M. Render, B.Sc.

Chief, Advertising, Labelling and Registration Division: P. Soucy, B. Pharm.

Director, Bureau of Scientific Advisory Services: A.C. Hardman, M.D.,  
D.P.H.

Chief, Medicine and Pharmacology Division: J. Bishop, M.B., B.S.,  
M.R.C.S., L.R.C.P.

Chief, Submission Control Division: G.L. Kalbfleisch, B.S.A., M.S.A.

Chief, Toxicology, Food Additive and Pesticides Division: W.A. Mannell,  
B.Sc., Ph.D.

Chief, Standards and Additives Division: A.B. Swackhamer, B.S.A.

Chief, Veterinary Medicine Division: W.T. Oliver, D.V.M., M.Sc., Ph.D.

Director, Research Laboratories: A.B. Morrison, B.Sc., M.Sc., Ph.D.,  
M.S.

## HEALTH SERVICES BRANCH

Director General: E. A. Watkinson, M.D., C.M., D.P.H.

Deputy Director General: L. B. Pett, B.S.A., M.A., Ph.D., M.D., D.P.H.

Planning and Evaluation, Consultant: G. H. Josie, Sc.D., M.P.H.,  
B.Sc.

\*Epidemiology Division, Chief: E. W. R. Best, M.D., D.P.H.

(J. W. Davies, M.D., appointed 1-9-67)

Research Development, Medical Officer: R. W. Tooley, M.R.C.S.,

L.R.C.P., D.P.H. (to February 14, 1967) J. B. Murphy, M.A.,

M.D., D.P.H. (from February 15, 1967)

Chief Nursing Consultant: Miss Dorothy M. Percy, R.R.C., Reg. N.

(to January 6, 1967)

\*Public Health Nursing Consultant:

Miss V. H. Huffman, Reg. N., B.S., M.P.H. (now attached to  
Office of Deputy Minister of National Health)

## SPECIAL HEALTH SERVICES

Aerospace Medicine and Safety, Consultant:

W. A. Prowse, C.D., M.D., C.M., D.P.H., D.I.H.

\*Child and Maternal Health,

Chief: Jean F. Webb, B.Sc., M.D., D.P.H. (Vacant from 1-11-67)

Dental Health Division, Chief: R. A. Connor, D.D.S., D.D.P.H.,

F.I.C.D.

Emergency Health Services, Chief:

W. S. Hacon, M.B., B.S., D.C.H., D.H.A. (to December 31, 1966)

R. W. Tooley, M.R.C.S., L.R.C.P., D.P.H. (from February 15,  
1967)

Health Education, Consultant: M. E. Palko, B.A., M.P.H.

Laboratory of Hygiene, Director: Dr. E. T. Bynoe, M.Sc., Ph.D.

\*Mental Health Division, Chief: Morgan Martin, M.D., C.M., M.Sc.

(to September 30, 1966) (A. E. Davidson, M.D., appointed 1-4-67)

Acting Chief: C. M. Mooney, Ph.D. (from October 1, 1966)

Nutrition Division, Chief: J. E. Monagle, B.Sc., M.D.

Occupational Health Division, Chief: T. H. Patterson, M.D., D.P.H.,  
M.P.H.

Public Health Engineering Division, Chief: W. R. Edmonds, M.A.Sc.

B.P. Eng.

Radiation Protection Division, Chief: P. M. Bird, M.Sc., Ph.D.

Rehabilitation Services, Director: O. Hoffman, M.D.



HEALTH INSURANCE  
AND  
RESOURCES BRANCH

Director General: E. H. Lossing, M. D., C. M., M. P. H.  
Assistant Director General: E. W. Oliver, B. A.

HEALTH GRANTS

Director: G. E. Wride, M. D., D. P. H.

HOSPITAL INSURANCE AND DIAGNOSTIC SERVICES

Director: R. B. Goyette, B. A., M. D., D. P. H.

HEALTH RESOURCES

Director: W. S. Hacon, M. B., B. S., D. H. A.

MEDICAL CARE INSURANCE

Director: R. A. Armstrong, M. D.

HEALTH FACILITIES DESIGN

Chief: G. W. Peck, C. D., B. Arch., M. Sc., M. R. A. I. C.

INCOME SECURITY BRANCH

Director General: J. A. Blais

CANADA PENSION PLAN

Director: G. L. Pickering, B. A., B. S. (Accounting)

FAMILY ALLOWANCES, YOUTH ALLOWANCES  
AND OLD AGE SECURITY

Director: R. H. Parkinson, B. A., M. S. W.  
Assistant Director: W. F. Hendershot, B. A.

Regional Directors

Newfoundland, St. John's: L. C. Abbott

Prince Edward Island, Charlottetown: J. E. Green, B. Sc., M. S. W.

Nova Scotia, Halifax: J. E. Green (to March 31, 1967) L. C. Russell

New Brunswick, Fredericton: A. Nicholson (to March 31, 1967) Vacant

Quebec, Quebec: J. A. M. Caron

Ontario, Toronto: J. G. Parsons, B. Sc. (Educ.), M. Sc.

Manitoba, Winnipeg: W. A. Wright, B. A., B. S. W.

Saskatchewan, Regina: R. J. G. Mitchell (to March 31, 1967)  
R. S. Johnston  
Alberta, Edmonton: W. W. Dahl  
British Columbia, Victoria: W. H. Davis, D. P. A.

WELFARE ASSISTANCE  
AND SERVICES BRANCH

Director General: R. B. Splane, M. A., D. S. W.

CANADA ASSISTANCE PLAN

Director: N. F. Cragg, M. S. W.

WELFARE GRANTS

Director: W. W. Struthers, B. A., B. S. W.  
B. J. Iverson, B. A., B. S. W., M. S. W.  
(from December 15, 1967)

SPECIAL PROGRAMS BRANCH

Director General: J. A. Macdonald, B. A.

EMERGENCY WELFARE

Director: P. H. Stehelin, L. L. B.

FITNESS AND AMATEUR SPORT

Director: R. Dion, B. A., M. A.  
L. E. Lefaive, B. A. (from February 1, 1968)

INTERNATIONAL WELFARE

\*Director: B. J. Iverson, B. A., B. S. W., M. S. W. (Vacant)

ADMINISTRATION BRANCH

Director General: W. B. Brittain, D. F. C., B. Sc.

FINANCIAL ADMINISTRATION

Director: D. R. Aitchison, A. C. W. A.



## LIBRARY

Departmental Librarian: Miss M. J. Morton, B. H. Sc., B. L. S.

## MANAGEMENT SERVICES

Chief: G. H. Aubut, B. Com.

## MATERIEL SERVICES

Chief: I. C. Ellis, Ph. C.

## OFFICE AND SECRETARIAL SERVICES

Chief: F. E. Goudge

## PERSONNEL ADMINISTRATION

Director: J. B. Hartley, B. A., M. Sc.

## REGISTRY SERVICES

Chief: G. E. Logan

## TRANSLATION

Chief: G. A. Sauvé

## TREASURY

Chief: H. L. Rock

## CENTRAL SERVICE DIVISIONS

## INFORMATION SERVICES

Director: Harvey W. Adams

## LEGAL DIVISION

General Counsel: R. E. Curran, Q. C., B. A., L. L. B.

## RESEARCH AND STATISTICS

Director: J. E. E. Osborne, M. A., D. H. A.

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\* Indicates status of position or incumbent as of time of preparation of this Directory.





# DIRECTORY OF DEPARTMENTAL ESTABLISHMENTS

## ADMINISTRATIVE OFFICES

### OTTAWA

Brooke Claxton Building, Tunney's Pasture

#### Canada Assistance Plan Offices

|                        |                                                                                         |
|------------------------|-----------------------------------------------------------------------------------------|
| ST. JOHN'S, Nfld. .... | Dept. Public Welfare,<br>Confederation Building                                         |
| HALIFAX, N.S. ....     | Dept. Public Welfare, P.O. Box 696                                                      |
| FREDERICTON, N.B. .... | Dept. of Health and Welfare,<br>Third Floor Centennial Bldg.,<br>King and St. John Sts. |
| QUEBEC, P.Q. ....      | Quebec Social Allowance Commission,<br>Parliament Buildings                             |
| TORONTO, Ont. ....     | Dept. of Social and Family Services,<br>Hepburn Bldg., 5th Floor,<br>Queen's Park       |
| WINNIPEG, Man. ....    | Dept. of Welfare,<br>270 Osborne Street North                                           |
| REGINA, Sask. ....     | Dept. of Welfare, 2240 Albert Street                                                    |
| EDMONTON, Alta. ....   | Dept. of Public Welfare,<br>405 Executive Building,<br>109th Street and Jasper Avenue   |
| VICTORIA, B.C. ....    | Dept. of Social Welfare,<br>R. 340, Parliament Bldgs.                                   |

#### Canada Pension Plan Offices

|                            |                                                                  |
|----------------------------|------------------------------------------------------------------|
| ST. JOHN'S, Nfld. ....     | Sir Humphrey Gilbert Building,<br>165 Duckworth Street           |
| CORNER BROOK, Nfld. ....   | Office Floor, Millbrook Shopping<br>Centre, Herald Avenue        |
| CHARLOTTETOWN, P.E.I. .... | Dominion Building, 97 Queen St.                                  |
| HALIFAX, N.S. ....         | 5th Floor, Sir John Thompson Building,<br>1256 Barrington Street |
| ANTIGONISH, N.S. ....      | Metropolitan Bldg., 229A Main St.                                |
| SYDNEY, N.S. ....          | Federal Bldg., Dorchester<br>and Charlotte Sts.                  |
| FREDERICTON, N.B. ....     | Federal Building, 633 Queen St.                                  |
| MONCTON, N.B. ....         | 1111 Main St.                                                    |
| SAINT JOHN, N.B. ....      | Customs Building, 189 Prince<br>William St.                      |

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| EDMUNDSTON, N.B. ....       | 36 Court St.                                                           |
| TORONTO, Ont. ....          | 25 St. Clair Avenue East                                               |
| SCARBOROUGH, Ont. ....      | 2805 Eglinton Avenue East                                              |
| NORTH YORK, Ont. ....       | Newtonbrook Shopping Plaza                                             |
| WILLOWDALE, Ont. ....       | 5851 Yonge St.                                                         |
| ETOBICOKE, Ont. ....        | 3269 Bloor Street West                                                 |
| HAMILTON, Ont. ....         | Union Gas Bldg., 20 Hughson St. S.                                     |
| LONDON, Ont. ....           | Toronto Dominion Bank Bldg.,<br>365 Richmond St.                       |
| ST. CATHARINES, Ont. ....   | 15 Church Street                                                       |
| SAULT STE. MARIE, Ont. .... | Sault Star Bldg., 369 Queen St. E.                                     |
| TIMMINS, Ont. ....          | 273 Second Avenue                                                      |
| KINGSTON, Ont. ....         | Federal Building, Clarence St.                                         |
| PETERBOROUGH, Ont. ....     | Federal Building, 411 Water St.                                        |
| SUDBURY, Ont. ....          | 96 Larch Street                                                        |
| OTTAWA, Ont. ....           | Concord Building, 280 Albert St.                                       |
| WINDSOR, Ont. ....          | Unemployment Insurance Commission<br>Bldg., 441 University Avenue West |
| PORT ARTHUR, Ont. ....      | Post Office Bldg., 33 South Court St.                                  |
| KITCHENER, Ont. ....        | 220 King Street East                                                   |
| WINNIPEG, Man. ....         | MacDonald Bldg., 344 Edmonton St.                                      |
| BRANDON, Man. ....          | Federal Bldg.,<br>Princess Ave. at 11th St.                            |
| REGINA, Sask. ....          | 4th Floor, Federal Bldg.,<br>1975 Scarth St.                           |
| SASKATOON, Sask. ....       | Room 608, Financial Bldg.,<br>230-22nd St. E.                          |
| EDMONTON, Alta. ....        | Federal Bldg.,<br>107th St. and 99th Ave.                              |
| LETHBRIDGE, Alta. ....      | Federal Bldg., 4th Ave.<br>and 7th St. S.                              |
| CALGARY, Alta. ....         | Petro-Chemical Bldg.,<br>811-7th St. S.W.                              |
| VICTORIA, B.C. ....         | 1230 Government St.                                                    |
| VANCOUVER, B.C. ....        | 100 West Pender St.                                                    |
| PENTICTON, B.C. ....        | Old Federal Bldg.,<br>301 Main St.                                     |
| WHITEHORSE, Y.T. ....       | Federal Building                                                       |

#### Emergency Welfare District Offices

|                      |                                                             |
|----------------------|-------------------------------------------------------------|
| VICTORIA, B.C. ....  | Room 241, 816 Government Street                             |
| EDMONTON, Alta. .... | Room 301, Federal Building,<br>107th Street and 98th Avenue |
| QUEBEC, P.Q. ....    | P.O. Bldg., 2nd Floor, 3 Rue Buade                          |
| HALIFAX, N.S. ....   | 1256 Barrington St., Halifax, N.S.                          |



## Family Allowances, Youth Allowances and Old Age Security

|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| ST. JOHN'S, Nfld. ....     | Building 102, Pleasantville                                   |
| CHARLOTTETOWN, P.E.I. .... | Dominion Building, 97 Queen St.                               |
| HALIFAX, N.S. ....         | Ralston Building, 1557 Hollis St.                             |
| FREDERICTON, N.B. ....     | Federal Building, 633 Queen St.                               |
| QUEBEC, P.Q. ....          | 15 Henderson Street                                           |
| MONTREAL, P.Q. ....        | 685 Cathcart St.                                              |
| TORONTO, Ont. ....         | 789 Don Mills Road, Don Mills                                 |
| WINNIPEG, Man. ....        | MacDonald Building,<br>344 Edmonton St.                       |
| REGINA, Sask. ....         | Dominion Government Bldg.,<br>Scarth Street and Victoria Ave. |
| EDMONTON, Alta. ....       | 646 Federal Building, 107th St.                               |
| VICTORIA, B.C. ....        | 1230 Government St.                                           |

## Food and Drug Laboratories

|                      |                                                                |
|----------------------|----------------------------------------------------------------|
| OTTAWA, Ont. ....    | Tunney's Pasture                                               |
| HALIFAX, N.S. ....   | P.O. Box 605, Ralston Bldg.,<br>1557 Hollis Street.            |
| MONTREAL, P.Q. ....  | Room 800, 400 Youville Square,<br>Montreal 1                   |
| TORONTO, Ont. ....   | 55 St. Clair Ave., East, Toronto 7                             |
| WINNIPEG, Man. ....  | Room 310, Federal Bldg.,<br>Main and Water Streets, Winnipeg 1 |
| VANCOUVER, B.C. .... | 7th Floor, 1001 West Pender Street,<br>Vancouver 1             |

## Food and Drug Offices

|                            |                                                                         |
|----------------------------|-------------------------------------------------------------------------|
| OTTAWA, Ont. ....          | 100 Gloucester Street, Ottawa 4                                         |
| HALIFAX, N.S. ....         | P.O. Box 605, Ralston Bldg.,<br>1557 Hollis Street                      |
| CHARLOTTETOWN, P.E.I. .... | Dominion Public Bldg., Queen St.                                        |
| SAINT JOHN, N.B. ....      | P.O. Box 396, Room 517, New<br>Customs Bldg., 250 Prince<br>William St. |
| SYDNEY, N.S. ....          | P.O. Box 34, Federal Bldg.                                              |
| ST. JOHN'S, Nfld. ....     | P.O. Box 5115, Sir Humphrey<br>Gilbert Bldg., Duckworth Street          |
| QUEBEC, P.Q. ....          | Room 277, Gare Maritime Champlain,<br>Anse au Foulon                    |
| THREE RIVERS, P.Q. ....    | P.O. Box 1146, Post Office Office Bldg.                                 |

|                        |                                                                      |
|------------------------|----------------------------------------------------------------------|
| HULL, P.Q. ....        | Room 206, Federal Bldg.,<br>Rue Principale                           |
| SHERBROOKE, P.Q. ....  | P.O. Box 1120, 315 King Street West                                  |
| MONTREAL, P.Q. ....    | Room 800, 400 Youville Square                                        |
| TORONTO, Ont. ....     | 55 St. Clair Ave., East                                              |
| CORNWALL, Ont. ....    | Room 251, Federal Bldg.,<br>45 Second St. E.                         |
| BELLEVILLE, Ont. ....  | P.O. Box 93, New Federal Bldg.                                       |
| HAMILTON, Ont. ....    | Room 530, National Revenue Bldg.,<br>150 Main St. W. at Caroline St. |
| KITCHENER, Ont. ....   | Room 208, Federal Bldg.,<br>15 Duke St. E.                           |
| LONDON, Ont. ....      | P.O. Box 504, Dominion Public<br>Bldg., 457 Richmond St.             |
| WINDSOR, Ont. ....     | Room 641, Dominion Public Bldg.                                      |
| SUDBURY, Ont. ....     | 3rd Floor, New Federal Bldg.                                         |
| PORT ARTHUR, Ont. .... | Room 313, Public Bldg.,<br>33 Court Street S.                        |
| WINNIPEG, Man. ....    | 310 Federal Bldg.,<br>Main and Water Sts.                            |
| BRANDON, Man. ....     | Room 227, Federal Bldg.                                              |
| SASKATOON, Sask. ....  | 307 London Bldg., 256 - 3rd Ave. S.                                  |
| REGINA, Sask. ....     | 402 Derrick Bldg., 2431 - 11th Ave.                                  |
| CALGARY, Alta. ....    | Customs Bldg.                                                        |
| EDMONTON, Alta. ....   | Room 541, Federal Bldg.                                              |
| KAMLOOPS, B.C. ....    | Room 235, 317 Seymour St.                                            |
| VANCOUVER, B.C. ....   | 7th Floor, 1001 West Pender St.                                      |
| VICTORIA, B.C. ....    | Room 408, Belmont Bldg.,<br>805 Government Street                    |

#### Prosthetic Services Offices

|                      |                                                           |
|----------------------|-----------------------------------------------------------|
| HALIFAX, N.S. ....   | c/o Camp Hill Hospital                                    |
| LANCASTER, N.B. .... | c/o Lancaster Hospital                                    |
| MONTREAL, P.Q. ....  | c/o Queen Mary Veterans Hospital,<br>4565 Queen Mary Road |
| TORONTO, Ont. ....   | c/o Sunnybrook Hospital,<br>Bayview Avenue                |
| OTTAWA, Ont. ....    | c/o D.N.D. Medical Centre,<br>355 Smyth Road              |
| LONDON, Ont. ....    | c/o Westminster Hospital,<br>Wellington Road              |
| WINNIPEG, Man. ....  | c/o Deer Lodge Hospital                                   |
| REGINA, Sask. ....   | Motherwell Building,<br>Victoria Avenue and Rose Street   |
| EDMONTON, Alta. .... | c/o University Hospital                                   |
| CALGARY, Alta. ....  | c/o Colonel Belcher Hospital                              |
| VICTORIA, B.C. ....  | c/o Veterans Hospital                                     |
| VANCOUVER, B.C. .... | c/o Shaughnessy Hospital                                  |



### Public Health Engineering District Offices

|                      |                                                              |
|----------------------|--------------------------------------------------------------|
| MONCTON, N.B. ....   | Post Office Building, P.O. Box 86                            |
| MONTREAL, P.Q. ....  | Coristine Bldg., Room 430,<br>410 St. Nicholas Street        |
| WINNIPEG, Man. ....  | 2nd Floor, Postal Station B,<br>Magnus Avenue at Main Street |
| EDMONTON, Alta. .... | Room 541, Federal Public Bldg.                               |
| VANCOUVER, B.C. .... | 6th Floor, Room 605,<br>1110 West Georgia Street             |
| KINGSTON, Ont. ....  | P.O. Box 535                                                 |

### Laboratory of Hygiene

|                   |                  |
|-------------------|------------------|
| OTTAWA, Ont. .... | Tunney's Pasture |
|-------------------|------------------|

### Occupational Health Laboratories

|                   |                                                  |
|-------------------|--------------------------------------------------|
| OTTAWA, Ont. .... | Environmental Health Centre,<br>Tunney's Pasture |
|-------------------|--------------------------------------------------|

### Radiation Protection

|                   |                                     |
|-------------------|-------------------------------------|
| OTTAWA, Ont. .... | Brookfield Rd., Confederation Hgts. |
|-------------------|-------------------------------------|

### Public Health Engineering

|                   |                                                  |
|-------------------|--------------------------------------------------|
| OTTAWA, Ont. .... | Environmental Health Centre,<br>Tunney's Pasture |
|-------------------|--------------------------------------------------|

### Aerospace Medicine

|                   |                                                  |
|-------------------|--------------------------------------------------|
| OTTAWA, Ont. .... | Environmental Health Centre,<br>Tunney's Pasture |
|-------------------|--------------------------------------------------|

Ottawa Bureau

OTTAWA, Ont. .... 402 Albert Street

Narcotic Control

OTTAWA, Ont. .... Colonel By Towers,  
66 Muriel Street

Regional Offices - Medical Services

Responsible for Indian Health Services; Northern  
Health Service; Quarantine, Immigration, Sick  
Mariners; Public Service Health and Civil Aviation  
Medicine

|                |                                                            |
|----------------|------------------------------------------------------------|
| ATLANTIC ..... | Immigration Bldg. Annex,<br>Pier 21, Halifax, Nova Scotia  |
| QUEBEC .....   | Room 700, 515 St. Catherine St. W.,<br>Montreal, Quebec    |
| ONTARIO .....  | Kenson Building, 233 Metcalfe Street,<br>Ottawa 4, Ontario |
| PRAIRIE .....  | 501 Chancery Hall, Edmonton,<br>Alberta                    |
| NORTHERN ..... | 500 Chancery Hall, Edmonton,<br>Alberta                    |
| PACIFIC .....  | 6th Floor, 1110 West Georgia Street,<br>Vancouver 5, B.C.  |
| EUROPEAN ..... | 38 Grosvenor Street,<br>London W.1, England                |

Immigration Medical Services Offices

Canada

|                          |                            |
|--------------------------|----------------------------|
| ST. JOHN'S, Nfld. ....   | Sir Humphrey Gilbert Bldg. |
| GANDER, Nfld. ....       | Gander Airport             |
| STEPHENVILLE, Nfld. .... | Harmon Field Airport       |
| SYDNEY, N.S. ....        | 63 Charlotte Street        |
| HALIFAX, N.S. ....       | Immigration Building       |
| MONCTON, N.B. ....       | Moncton Airport            |



|                       |                                 |
|-----------------------|---------------------------------|
| SAINT JOHN, N.B. .... | 89 Canterbury Street            |
| QUEBEC, P.Q. ....     | Champlain Harbour Station       |
|                       | Wolfe's Cove                    |
| MONTREAL, P.Q. ....   | 150 St. Paul Street West        |
| DORVAL, P.Q. ....     | Montreal International Airport  |
| OTTAWA, Ont. ....     | Ottawa International Airport    |
| MALTON, Ont. ....     | Toronto International Airport   |
| WINDSOR, Ont. ....    | Windsor Airport                 |
| LONDON, Ont. ....     | London Airport                  |
| WINNIPEG, Man. ....   | 705 Commercial Bldg.,           |
|                       | 169 Pioneer Avenue and          |
|                       | Winnipeg International Airport  |
| EDMONTON, Alta. ....  | Edmonton International Airport  |
| VANCOUVER, B.C. ....  | Immigration Building,           |
|                       | foot of Burrard St. and         |
|                       | Vancouver International Airport |
| VICTORIA, B.C. ....   | 816 Government Street           |

Overseas

|                                 |                                       |
|---------------------------------|---------------------------------------|
| VIENNA, Austria ....            | A1010, Vienna                         |
| BRUSSELS, Belgium ....          | 230 rue Royale                        |
| HONG KONG .....                 | 25th Floor, International Bldg.,      |
|                                 | 141 Des Voeux Rd. Central             |
| COPENHAGEN, Denmark .....       | Canadian Embassy, Visa Office         |
|                                 | Osterbrogade 43                       |
| LIVERPOOL, England .....        | 17 Harrington Street, Liverpool 2     |
| LONDON, England .....           | 38 Grosvenor Street, London W.1       |
| LEEDS, England .....            | City House, New Station St., Leeds 1  |
| BIRMINGHAM, England .....       | The Rotunda, New Street               |
|                                 | Birmingham 2                          |
| PARIS, France .....             | 4 Rue Ventadour 75                    |
| HAMBURG, Germany .....          | 2 Hamburg 50, Schillerstrasse 47 - 49 |
| COLOGNE, Germany .....          | Canadian Embassy, Visa Section        |
|                                 | Buchheimerstrasse 64/66, Koein        |
|                                 | Meulheim Weiner Platz,                |
|                                 | Cologne-Meulheim                      |
| STUTTGART, Germany .....        | Marquardt Gebaeude, Koenigstrasse 20  |
| ATHENS, Greece .....            | Canadian Embassy, 8 Othonos St.       |
|                                 | Athens 118                            |
| THE HAGUE, Holland .....        | 12 Carel Van Bylandtlaan              |
| ROME, Italy .....               | Via Zara, No. 30                      |
| MILAN, Italy .....              | Canadian Consulate General,           |
|                                 | Visa Office Via Turati 27             |
| BELFAST, Northern Ireland ..... | Canada House, 22 North St.            |
| LISBON, Portugal .....          | Canadian Embassy,                     |
|                                 | Edificio L'Urbaine - Vie 50           |
|                                 | Praca Marques de Pombal 14 -5D        |
| GLASGOW, Scotland .....         | Fleming House, 134 Renfrew St.,       |
|                                 | Glasgow C 3                           |

|                          |                                                                                    |
|--------------------------|------------------------------------------------------------------------------------|
| BERNE, Switzerland ..... | Canadian Immigration Medical Section<br>Helvetia Life, 3rd Floor<br>11 Belpstrasse |
| BRISTOL, England .....   | 5 - 18 Wine Street                                                                 |
| MARSEILLE, France .....  | 24 Avenue du Prado,<br>13 - Marseille, 6 <sup>e</sup>                              |

### Quarantine Stations and Sub-Stations

#### Maritime Quarantine Stations

|                        |                                   |
|------------------------|-----------------------------------|
| ST. JOHN'S, Nfld. .... | Sir Humphrey Gilbert Bldg.        |
| SYDNEY, N.S. ....      | 63 Charlotte St.                  |
| HALIFAX, N.S. ....     | Immigration Bldg., Annex, Pier 21 |
| SAINT JOHN, N.B. ....  | 89 Canterbury St., Pier 9         |
| QUEBEC, P.Q. ....      | Champlain Harbour Station         |

#### Sub-Stations

|                     |                      |
|---------------------|----------------------|
| BAIE COMEAU, P.Q.   |                      |
| MONTREAL, P.Q.      | 150 St. Paul St., W. |
| PORT ALFRED, P.Q.   |                      |
| PORT CARTIER, P.Q.  |                      |
| RIMOUSKI, P.Q.      |                      |
| SEVEN ISLANDS, P.Q. |                      |
| SOREL, P.Q.         |                      |
| THREE RIVERS, P.Q.  |                      |

|                     |                    |
|---------------------|--------------------|
| VICTORIA, B.C. .... | 816 Government St. |
|---------------------|--------------------|

#### Sub-Stations

|                                                                 |                                           |
|-----------------------------------------------------------------|-------------------------------------------|
| VANCOUVER (incl. New<br>Westminster and<br>Burrard Inlet) ..... | Immigration Bldg.,<br>Foot of Burrard St. |
|-----------------------------------------------------------------|-------------------------------------------|

PORT ALBERNI

#### Airport Quarantine Stations

##### Regular International Traffic

|                          |                                      |
|--------------------------|--------------------------------------|
| GANDER, Nfld. ....       | International Airport                |
| HALIFAX, N.S. ....       | International Airport                |
| MONTREAL, P.Q. ....      | International Airport (Dorval, P.Q.) |
| OTTAWA, Ontario .....    | Ottawa International Airport         |
| TORONTO, Ontario .....   | International Airport (Malton, Ont.) |
| WINDSOR, Ontario .....   | Windsor Airport                      |
| TRENTON, Ontario .....   | R.C.A.F. Airbase                     |
| WINNIPEG, Manitoba ..... | Winnipeg International Airport       |



|                         |                                           |
|-------------------------|-------------------------------------------|
| EDMONTON, Alberta ..... | International Airport<br>(Nisku, Alberta) |
| CALGARY, Alberta .....  | Calgary Airport                           |
| VANCOUVER, B.C. ....    | International Airport (Sea Island)        |

Infrequent International Traffic

ST. JOHN'S, Nfld.  
STEPHENVILLE, Nfld.  
SUMMERSIDE, P.E.I.  
GREENWOOD, N.S.  
MONCTON, N.B.  
FREDERICTON, N.B.  
QUEBEC CITY, P.Q.  
LONDON, Ontario  
SASKATOON, Sask.  
REGINA, Sask.

Sick Mariners Clinics

|                       |                                                 |
|-----------------------|-------------------------------------------------|
| HALIFAX, N.S. ....    | Immigration Building, Pier 21                   |
| SYDNEY, N.S. ....     | 63 Charlotte Street                             |
| SAINT JOHN, N.B. .... | 89 Canterbury Street                            |
| QUEBEC, P.Q. ....     | Champlain Harbour Station,<br>Wolfe's Cove      |
| MONTREAL, P.Q. ....   | 150 St. Paul Street West                        |
| VANCOUVER, B.C. ....  | Immigration Building, foot of<br>Burrard Street |
| VICTORIA, B.C. ....   | 816 Government Street                           |





DEPARTMENT OF NATIONAL HEALTH AND WELFARE

